











Modern Practice of Farriery:

OR, COMPLETE

HORSE DOCTOR.

EXPLAINING THE VARIOUS SYMPTOMS OF

The Approaching Disorders and the

MOST APPROVED CURES

For the several Diseases to which Horses are subject.

LIKEWISE

THE MOST CERTAIN RULES FOR

CHUSING HORSES,

WITH EASY DIRECTIONS FOR RIDING,

Whereby a person from small experience, may
become not only a complete Horseman,

BUT ALSO A COMPLETE FARRIER.

Including also the most judicious and approved methods

OF MANAGING A HORSE ON A JOURNEY.

*The whole being the result of 37 years
practice and experience.*



By J. THOMPSON, of Clifton, in Yorkshire.



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INSTRUCTIONS *for chusing* HORSES.

AMONG the number of difficulties attending the affairs of common life, there is not perhaps a greater than that of chusing a good horse. Nor will this appear strange when we consider the number of circumstantial niceties attending these creatures, with regard to their shape, make and manner of going, which are so various, that it would require a volume to describe. And indeed the best judge is obliged to content himself with guessing at some things, unless a sufficient trial be allowed; and even then he should proceed with the utmost caution and circumspection, regarding first the make, shape, bone and strength, then observing his paces strictly whether he goes too near the ground, or cuts before or behind, and how he goes all his paces with respect to speed; by minutely examining these particulars you will frequently, escape starting, lameness, bad action, and other imperfections. If the horse meets your approbation, and stands the test of these trials, you must proceed to the more necessary examination of the eyes, wind, knees, splents, spavins, wind-galls, ring-bones, quittors, cracks, and grease, descending lastly to the feet, in order to be assured that he is free from corns, running thrushes, cankers, and other defects; for a horse with bad feet, like a house with a

weak foundation, will do but little service. They should be smooth and tough, of a middle size, without a wrinkle, neither too hard and brittle, nor too soft. The heels should be firm, and no ways spongy or rotten, the frogs horny and dry, and the soles somewhat hollow, like the inside of a dish or bowl. Such feet will never disappoint your expectation; and such only should be chosen.

These cautions are too generally overlooked by young and inexperienced purchasers, who frequently sacrifice every consideration to the shrine and figure of fashion, and soon repent of their bargain.

The goodness or badness of the eyes is a particular that should be well attended to, though in this the best judges are too often deceived. The clearness of the eye is one indication of its goodness; but this is not all that should be attended to; the eye-lids, eye-brows, and all the parts belonging to it, must also be considered; for many horses, whose eyes appear clear and brilliant, will go blind at seven or eight years old. Be therefore careful to observe, whether the parts between the eye-lids and eye-brows are free from bunches, and that the part round the under eye-lid be not full or swelled; for these are indications that the creature's eyes will not last. When the eye is remarkably flat, or sunk within its orbit, it is a bad sign; or when it looks dead and lifeless. The iris, or circle, that surrounds the sight of the eye, should be dis-

tinged, and of a pale variegated cinnamon colour; for this is always a sure sign of a good eye. When the horse is first led out of a dark stable into a strong light, be sure to observe whether he wrinkles his brow, and looks upward to receive more light: for these are indications of his eyes being bad. But if you observe that the dimensions of the pupil are large and that they contract upon his coming into a strong light, it is almost an infallible sign that the eye is good.

Particular regard should be had to the shoulders of a horse; they should not be too much loaded; for a horse with heavy shoulders can never move well; on the other hand, one that has very thin shoulders, with a narrow chest, though he may move more briskly while he keeps sound, yet such horses are generally weak, and of all others the most easily lamed in the shoulders. A medium therefore should be observed; for such only are horses for service. Be careful to observe the creature's motions, that the shoulders, knees, and pasterns all act together in concert, and have but one spring of motion, for such alone can be said to move well and with freedom.

The limbs should be free from splents and wind-galls; the knees strait, and not bending; the back sinews strong and well braced; the pastern joints clean, and free from swelling of all kinds; and the hocks lean and dry, free from curbs, spavins and flatulent tumours.

The body or carcass should be of a proper

proportion, not too small or slender, nor too large : the back should be strait, or have only a moderate sinking below the withers ; for when a horse has a low back, and is higher behind than before, it is both very ugly, and an indication of weakness. The back should also be of a proper length ; his ribs large, his flanks smooth and full, and his hind parts, or uppermost haunches, not rising higher than his shoulders.

Notwithstanding these instructions respecting the make, shape, bone and paces of a horse, there are no infallible directions ; for there are many instances of horses, of shape and figure having been very bad goers, and others so cross made as not to possess one good point, yet equal in action to the best figures : though we may admit this exception, yet the points we have spoken of should claim the attention of the purchaser, as it is not always that he can have a sufficient trial to judge of his speed and motion, but when he has an opportunity it does not require any great depth of penetration to discover a good-goer from a bad-one.

The next thing to be regarded in a horse is his wind, which may easily be known by the motion of his flanks. A broken-winded horse always pinches in his flanks with a very slow motion, and drops them suddenly, which any one with a little observation may perceive. But many horses breathe thick that are not broken-winded ; which will happen in any

horse that is foggy and foul fed, without sufficient exercise. But if a horse has been in good keeping and had proper exercise, and yet these symptoms appear, it is an indication that there is some defect either accidental or natural, such as a narrow chest, or some cold that has contaminated his lungs.

Besides these already enumerated, there are other particulars that should be observed in choosing a horse. If his head be large and fleshy, and his neck thick and gross, he will always go heavy on the hand, and therefore should never be chosen. A horse that has his hocks distant and very wide, seldom moves well, but is apt to cut and chafe, by crossing one leg over the other. Fleshy-legged horses are generally subject to the grease, and other infirmities of that kind, and therefore should not be chosen. But what should be carefully attended to is the temper of the horse; because if his temper be good, it greatly augments his value, whereas the contrary exposes him to many accidents. It is indeed difficult to discover the temper of a horse without a proper trial, which should always be obtained if possible. Fear is an impediment in a horse's temper that greatly lessens his value. A fearful horse endangers himself and his rider. Almost every day affords us melancholy instances of persons being hurt, and almost killed by fearful, starting horses, and many such are utterly spoiled and ruined by the accidents

they are exposed to by their fear. A fearful horse may be known at first sight by his starting, crouching and creeping.

A horse that is very hot and fretful is also to be avoided ; but the reader should carefully distinguish between a hot, fretful horse, and one that is eager and craving ; the former begins to fret the moment he is out of the stable, and continues in that humour till he has quite fatigued himself ; but the latter endeavours only to be the first in the chase, or the foremost in the field, and is truly valuable ; he has those qualities that resemble prudence and courage, the other intemperate heat and rashness.

I would advise every one to have some experimental knowledge of these creatures before he trusts to his own judgment ; for the dealers have so many arts to hide the defects of their horses, that the very best judges are often deceived ; and particularly in the teeth, in which each sign is doubtful and liable to deception, through the various arts and designs of the dealers, who by engraving and burning artificial marks in some teeth, and totally extracting [or beating out] others render the horse of any seeming age most applicable to their purpose. And these faults cannot be easily discovered but by grooms, or judges, who are in the constant habit and practice of making such remarks and observations. Nor is there any matter in a horse requiring a nicer discrimination in judgment, than to ascertain

to a certainty the age of a horse by his teeth only; two men of abilities and experience on the opposite side of a horse's mouth, having been known at the same time to declare him of different ages, when by exchanging sides each changed his opinion, and the horse proved by the common rule to be coming a year older on one side than the other. These doubts in respect to the certainty of age being admitted, one fixed rule is incontrovertible—That after the mark (which is the general guide) is obliterated, the longer the teeth are, and the narrower the under-jaw is towards its extremity, the more the horse is advanced.

Though the instructions we have here laid down may conduce to form the judgment of a young and unexperienced purchaser, yet he should never attempt to obtain a high-priced horse from the hammer of a repository, without the assistance and advice of a friend, qualified by experience for the arduous task of discrimination. For it should be remembered that at such places a horse is seldom, if ever, displayed in a state of nature; he is thrown into a variety of alluring attitudes, and a profusion of spirit by the power of art—That predominant incentive the whip before, and the aggravating stimulus of the ginger behind, (known among jockies by the phrase of *fig-ging*) giving to the horse all the appearance of spirit, (in fact fear) that the injudicious spectator is too often imprudently induced to believe is the spontaneous effort of nature.

The short time allowed for inspection and purchase can never admit of much satisfactory investigation, for in the general hurry in "shewing out," the short turns and irregular actions of the horse, the occasional judicious smacks of the whip, the confused noise of the bidders, the prattle of the auctioneer, and the flourishing waves of the hammer; the qualifications of the object are frequently forgotten, and no consideration prevails but that of personal opposition. Such a combination of circumstances, tending so much to perplex and confuse, proves the necessity of the utmost care, caution, and circumspection. The eyes of Argus would hardly prove too numerous upon the occasion, a bridle being as necessary upon the tongue as a pad-lock upon the pocket, for amidst the great variety of jockeyship in the art of horse dealing, a purchaser must be in possession of a great share of good fortune or sound judgment to elude the roguery and deception of the horse-dealers.

These weekly sales, however, are not without their uses, for though they cannot be recommended to buy at, they are well adapted for selling. According to the customary usage of these places, you may get rid of the lame, blind, restive, splented, broken-winded, gandered or spavined horse without incurring censure or disgrace. The seller whether a gentleman, or dealer, may act with every degree of art and cunning he can possibly practice. They have an equal right to puff off their own

horses with lavish praises, or bidding for them with pretended eagerness for the purchase, for the purpose of urging the unwary to bid beyond the value.

There is no consolation for those who have been HAD (according to the jockey phrase) but the law of retaliation by a repetition of the transfer: they are under a necessity of having recourse to the same deceptive arts in selling as had been practised on them in buying, so that a constant round of disabled horses are exhibited for sale, on the leading principle of self-justice.

From these facts which are confirmed by frequent experience, it follows of course, that the most effectual method of procuring a good horse is to make the purchase in the country, by which means you may procure horses that have not experienced the bad effects of hot stables, irregular feeds, indolent hostlers, and indifferent riders, which circumstances conspire to bring on the effects of bad humours, depraved appetites, loss of flesh, tender feet, cracked heels, swelled legs, and inflamed eyes, and more than all, the bad treatment they receive at the London livery stables, where they get little else than hay, water and hard blows, except their appetites are keen enough to relish straw, which is at times sufficiently clear to supply the want of corn. And these are the stable comforts of the London liveries.

Some of our Readers, perhaps may think that in the preceding pages we have descended to too many particulars, conceiving that they are too well known to need any comment; but these instructions are very essential to many who pretend to a tolerable share of knowledge. As I have frequently found these juvenile sons of Nimrod talk confidently of—"full eye—small ear—short back—close fillet, deep chest—strong pastan—sound hoofs—splents,—spavins, wind-galls, and strains," and yet be totally unacquainted with either. For these enlightened pupils having no other opportunity of improving their knowledge, but on worn-down and foundered hacks, when they purchase upon this empty knowledge frequently repent of their dear bought experience. Notwithstanding which we urge these cautions, conceiving it our indispensable duty to prevent these self-taught devotees from becoming dupes to the arts which are constantly practised to trick and pilfer the unwary.

Having suggested some hints respecting the purchase of horses, we cannot refrain from making some observations on the absurd, ridiculous, and injurious applications of improper medicines, which call so loudly for a rational system to rescue such valuable animals from the danger they are constantly exposed to through the ignorance and obstinacy of those persons to whom the care of them is generally entrusted; every *stable boy* affecting to be a

wise as the groom his superior, and the groom from his self-instructed knowledge pretending to be superior to the *farrier*; their heads and pockets are crammed full of the quintessence of stupidity, borrowed from their companions as ignorant as themselves, who are neither acquainted with the cause, progress or cure of the major-part of the distempers, and whose prescriptions are so obsolete that the experienced Farrier often shudders at the consequences which must result from the practices of these murderers of horses; as they jumble in one indiscriminate mass, purgatives and astringents, cordials and coolers, mercurials, antimonials, and diuretics; and these contrarieties form their System of Pharmacy.

The obsolete customs and practices handed down for a series of years from one ancient prescription to another, and those who through ignorance could not avail themselves of these antiquated productions have been no less industrious in inculcating to them their sagacity and penetration by verbal tradition, recipes and prescriptions of as little efficacy as those prescribed by these ancient authors. For since the knowledge of Pharmacy and Surgery has been improved and extended, and many salutary discoveries have been made by chymical process, those grand specifics, mercury, opium, antimony, bark, &c. have been very successfully introduced into practice, to the exclusion of other forms adopted many years ago: I shall therefore proceed to my

mode of practice, and I hope the deviations I have made in my treatment from preceding writers will give satisfaction to the readers by facilitating the cure of those useful animals.

Having adverted to the injuries the superior class of horses sustain through the bad treatment of London livery stables ; it appears equally necessary to make some remarks on the management of draft horses, which it must be admitted are more essentially useful to the public at large than any other breed of horses in the kingdom.

By draft horses we do not mean those pampered steeds which are supported with much care and expence to gratify the pride of the great, or subserve the end of personal ostentation, but the vast number of useful animals daily employed in services of the utmost importance to the community, such as agriculture, the conveyance of divers articles of trade, and other purposes equally conducive to the promotion of commerce and the benefit of mankind.

From the extensive concerns of the proprietors, those horses, though they sustain the hardest labour, are generally the most neglected in point of care and attention, being commonly entrusted to the sole management and merciless treatment of their drivers.

To this cause may be imputed the greatest number of those defects and injuries which result from blows, bruises, and many instances of cruel or injudicious treatment, such as bad

eyes, broken wind, grease, colic, and many other consequent defects: but the greatest evil attending these useful animals is their falling into the hands of ignorant country Farriers, the bad effects of whose pretended knowledge I have already set forth in many instances.

One of the most distressing and dangerous diseases to which these horses are liable, is the colic, which is in general brought on by the negligence and ignorance of those to whom their care and management are committed. The horses when the fluids are rushing with the utmost impetuosity through the vascular system, and thirst has been excited to the extreme by their having been kept a long time without water, are suffered greedily to drench themselves with immense quantities, without restraint or the least regard to moderation. The consequences of such inadvertence must be obvious from every principle both of the human and animal œconomy.

Broken-Wind is often the effect of coarse, full, and foul feeding; the state of the lungs being more or less affected by the quantities of chaff, or gross latter crop of clover hay, with which these horses are fed during a series of hard labour, and which with a small quantity of corn constitute the greatest part of their aliment.

Another neglect with respect to the management of draft horses, which lays the found-

ation of a Disease we have treated of under Class II. Sect. V. viz. *Grease*, nothing can more effectually tend to the prevention of this disease than a constant care to keep the legs and heels of these horses closely clipped, by which means neither the clay and dirt of the winter, nor the dust and sweat of the summer can affect those parts by their adhesion, as the cause, which is a prodigious bust of hair, will thereby be obviated.

DIRECTIONS

FOR TREATING AND MANAGING HORSES

ON A JOURNEY.

BEFORE you set out on a journey, you should carefully observe whether your horse's shoes be fast, whether they fit easy, whether he cuts before or behind, or interfere as it is called. And it will be prudent to remember, that if a horse cuts with bad shoes, he will probably do it when new shod, notwithstanding what the dealers in horses will tell you to the contrary.

If your horse's back should inflame from the rubbing of the saddle, let the part, as soon as you perceive it, be washed with salt and water, warm urine, vinegar, &c. and the stuffing of the saddle altered, so as to take off the pressure from the part affected. But if the skin be broke in holes before you perceive it, the injured part should be washed with a mixture, composed of equal parts of spirits of wine and tincture of myrrh and aloes, with the addition of a little oil of turpentine. It will however be necessary, in this case, to look often at your horse's back, and sometimes to walk on foot in order to ease him.

It often happens, especially to young horses, that their legs will swell in travelling, or what the farriers call becoming gourdy; and this more frequently happens when the horse cuts. It is also observed, that the hind legs are more subject to swell than the fore, because his fore-parts stand higher in the stall, and consequently the greatest stress lies on his hind legs. The best method to prevent this incident, is to wash the horse's legs well in warm water every time you bait, by which means the disease will be prevented, and much trouble, time and expence saved. Soft warm water, which will bear soap, is full as good for this purpose, as it can be made by any addition; and by washing the legs thoroughly with this sort of water, something warmer than a man can bear his feet in, and the sand and dirt contracted in travelling, will be washed away, and the pores of the skin at liberty to admit perspiration, which will prevent a stagnation of the blood and juices in these depending parts. You should also remember to procure your horse a wide stall, proper bedding, and good dressing, as these will prove of the greatest use in preventing the limbs from swelling. There are indeed few grooms that dress a horse properly; but it should be remembered, that whoever expects his horse should perform his duty well, must take care the creature be well rubbed and cleaned; and as nothing is more subservient to health than what we call friction, his skin should there-

fore be rubbed till the whole is of a glowing warmth, and he will always, with proper feeding answer his master's expectations.

Nothing is of more consequence in travelling, than to take care your horse have water at proper times, and in proper quantities. When a horse travels he perspires considerably, especially in hot weather; he should therefore be allowed to drink a little now and then, as opportunity offers, which will refresh him greatly: but never let him drink much at a time, for if you suffer him to drink his fill, he will be dull and sluggish afterwards, besides the harm he may afterwards receive from drinking a large quantity of cold water, if the creature be very hot. But when you come near, that is, within a mile and a half, or two miles, of the place you intend to bait at, be it noon or night, you may suffer him to drink more freely, going at a moderate trot afterwards; for by this means the water will be well warmed in his belly, and he will go in cool. It should however be observed, if there be no water on the road, never suffer your horse to be led to water, or wash his heels after you have arrived at your inn, but let him have water, made luke-warm, after he has stood some time in the stable; for much mischief has been done by imprudent riders, who have travelled hard and suffered their horses to drink as much as they would just at going into the town or inn where they intended to stay.

It is a general rule, that whenever any extraneous body, or foreign matter, as sand, gravel, &c. be lodged in any part of the animal machine, that it be extracted as soon, and with as much ease as possible. If gravelly matter be got into a nail-hole, or by any other aperture to the quick, it ought to be removed as soon as possible, though with as little loss of substance as the nature of the case will admit of, for it is a folly to cut, scrape, and pare the hoof, so much as is too frequently done by ignorant Farriers: because the very means made use of to remove the complaint, will increase the evil, as it will be a considerable time before the deficiency can be repaired: and till that is done, the same part will be liable to admit more gravel into the same hole: So much therefore, and no more, of the hoof should be taken away, as is absolutely necessary, viz. so far as till the blackness or discolouration vanishes; and afterwards the wound should be dressed with the following balsam:

TAKE of gum benjamin, half an ounce; storax, three drams; balsam of Peru, half an ounce; succotrine aloes, three drams; myrrh, six drams; powder all grossly, and after putting them into a gooseberry bottle, pour upon them one pint of spirits of wine, and corking it loosely, set the bottle in sand in an iron pot over a middling fire, and keep the spirits pretty warm for twenty-four

hours, shaking the tincture up every now and then, to dissolve the gums &c. after which you may stop it closely up for use, and decant it off clear as you want it.

The method of using this balsam, is to apply it warm to the wound, dipping a piece of or lint in it, and fasten it upon the part that is cleared of the gravel, thorns, &c. and to renew as it grows dry.

Strains, as well as twisting in the joints, happen on a journey, without any sensible heat, or untoward appearance of swelling ; so that farriers often mistake the place where the ailment lies ; this therefore must be carefully sought for, and the medicines applied to the part affected, as are recommended in the chapter on strains.

DIRECTIONS FOR RIDING.

IT is a general maxim with most people, inexperienced in riding, to hold the bridle tight when they discover the horse to be frightened ; whereas on the contrary, they should let the reins loose on his neck, by which means he will quietly pass the object that offends his eye. Others turn him out of his track, and endeavour to make him face the object ; but this method seldom has its effect. When a horse starts at any thing, keep him in the road, and hold his head the contrary way to the thing he starts at, pressing your legs tight against his sides. By this means he may be led (for they will not always be forced) up to what frightened him. Gentle methods generally operate much better than severe ones.

It is necessary to observe that the above method in passing an object may perhaps be somewhat unnecessary in a managed horse ; but even such a one should be made to look another way at the time of passing, unless it be something you are desirous he should be accustomed to the sight of. A horse whose fear arises from his not being used to objects should not be treated in this manner, because the

startling is owing merely to an active and lively disposition.

The best method to reconcil'e a horses's ear to the sound of a drum, is by beating one near him at the time of feeding him ; this not only familiarizes the noise to him, but makes it pleasant, as a fore runner of his meat ; whereas if he was forced, he might start at it as long as he lived. Might not this be applied to his startling at other things, and shew that it would be better to suffer him (provided he does not turn back) to go a little from, and avoid an object he has a dislike to, and to accustom him to it by degrees, convincing him as it were, that it will not hurt him, than to punish him.

It is a common supposition, that a horse fears nothing so much as his rider ; this supposition is wrong ; for is it a wonder that a horse should be afraid of a loaded waggon ; may not the hanging load seem to threaten the falling on him ? To mitigate such timidity, press your leg hard on the opposite side, turning his head at the same time, and he will quietly pass. Is it not likely to suppose that when a horse is driven up to a carriage he starts at, he conceives himself obliged either to attack, or run against it ? Can he understand the rider's spurring him with his face directed to it as a sign for him to pass it ? A horse is easily alarmed, he will even catch back his head from a hand going to caress him. Nor should he be pressed to it, for if he once gains his ends, he will repeat what he finds

hath foiled his rider. The only way is to use him to some tone of voice which he may understand as an expression of dislike to what he is doing ; for in all horses there is a spirit of opposition.

If you meet with a carriage that you think will frighten him on the road, when you have once let him know he is to pass it, besure you remain determined, and press him on. Do this more especially when part of the carriage is already past you ; for if, when he is frightened, he is accustomed to go back, and turn round, he will certainly do it, if he finds, by your hands slackening, and legs not pressing, that you are irresolute ; and this at the most dangerous point of time, when the wheels of the carriage take him as he turns. Remember not to touch the curb rein at this time, it will certainly check him. Ride with a snaffle, and use your curb, if you have one, only occasionally. Chuse your snaffle full and thick in the mouth, especially at the ends to which the reigns are fastened.

It is a nice matter to regulate the management of the curb ; some people apply the weight of the arm, whereas nothing more should be used than a slight turn of the wrist.

Some think the chief power over a horse is from the bridle ; but this is not all ; for instance, if the left spur touches him (and he is at the same time prevented from going forward) he has a sign, which he will soon understand, to move sideways to the right. In

the same manner to the left, if the right spur is closed to him; he afterwards, through fear of the spur, obeys a touch of the leg, in the same manner as a horse moves his croup from one side of the stall to the other when any one strikes him with his hand. In short his croup is guided by the leg, as his head is by the bridle. He will never disobey the leg, unless he become restive. By this means, you will have a far greater power over him; he will move sideways if you close one leg to him, and strait forward if both: even when he stands still your legs held near him will keep him on the watch, and with the slightest unseen motion of the bridle upwards, he will raise his head, and show himself to advantage.

From this use of the legs of the rider and guidance of the croup of the horse, are founded all the airs (as the riding-masters express themselves) which are taught in the manage, the passage, or side motions of troopers, to close or open their files, and indeed all their evolutions. It is chiefly used when a horse starts. When he is beginning to fly to one side, your leg on the side he is flying to stops his spring immediately. He goes past what he started at, keeping strait on, or as you chuse to direct him, and he will not fly back from any thing, if you press him with both legs. You must keep his haunches under him going down a hill: help him on the side of a bank; more easily avoid the wheel of a carriage; and approach more gracefully

and nearer to the side of a coach or horseman. When a pampered horse curvets irregularly, and twists his body to and fro, turn his head either to the right or left, or both alternately (but without letting him move out of the track) and press your leg to the opposite side : your horse cannot then spring on his hind legs to one side, because your leg prevents him ; nor to the other, because his head looks that way, and a horse does not start and spring to the side on which he looks.

The above rules may be of some use to inexperienced horsemen, by shewing them that something more is wanting than what is taught by their breakers, and that force will seldom or ever make a horse subservient to his keeper.

DIRECTIONS

WITH REGARD TO THE

MANAGEMENT OF HORSES

IN GENERAL.

THE practice of this useful art has been hitherto almost entirely confined to a set men who are totally ignorant of anatomy and the general principles of medicine. It is not therefore suprising, that their prescriptions should be equally absurd as the reasons they give for administering them. It cannot indeed be expected that farriers, who are almost universally illiterate men, should make any real progress in their profession. They prescribe draughts, rowel, and cauterise, without being able to give any other reason for their practice, but because their fathers did so before them. How can such men deduce the cause of a disease from its symptoms, or form a rational method of cure, when they are equally ignorant of the causes of diseases and the operation of medicines? The miserable state of this useful art, especially in

this country, has determined us to select, from the best authors, such a system of practice as seemed to be formed on rational principles.

It ought to be laid down as a general rule, to give horses as few medicines as possible; and by no means to comply with the ridiculous custom of some, who are frequently bleeding, purging, and giving balls, though their horses be in perfect health, and have no indication that requires such treatment. Proper management in their feeding, exercise, and dressing, will alone cure many disorders, and prevent most; for the simplicity of a horse's diet, which chiefly consists of grain and herbage, when good in kind, and dispensed with judgment, secures him from those complicated disorders which are the general effects of intemperance in the human body. In France, Germany, and Denmark, horses are seldom purged; there they depend much on alteratives; the use of the liver of antimony we have from the French, which is in general a good medicine for that purpose, and may, in many cases, be substituted in the room of purging. As hay is so material an article in an horse's diet, great care should be taken to procure the best: when it is not extraordinary, the dust should be well shook out before it is put in the rack; for such hay is very apt to breed vermin. Beans afford the strongest nourishment of all grain; but are best for labourious horses, except on particular occasions. In some seasons they breed a

kind of vermin called the *red bugs*, which is thought to be dangerous; the best method in such a case is to procure them well dried and split. Bran scalded is a kind of panada to a sick horse: but nothing is worse than a too frequent use of it, either dry, or scalded; for it relaxes and weakens the bowels too much. The botts in young horses may be owing to too much musty bran and chaff, given with other foul food to make them up for sale; particular care therefore should be taken that the bran be always sweet and raw. Oats, well ripened, make a more hearty and durable diet than barley, and are much better suited to the constitutions of British horses. A proper quantity of cut straw and hay mixed with them, is sometimes very useful to horses troubled with botts, indigestion, &c. Horses who eat their litter, should particularly have cut straw and powdered chalk given them with their feed; as it is a sign of a depraved stomach, which wants correcting. The salt-marshes are good pasture for horses who have been surfeited and indeed for many other disorders: they purge more by dung and urine than any other pasture, and make afterwards a firmer flesh; their water is for the most part brackish, and of course, as well as the grass, saturated with salts from sea water. A summer's grass is often necessary; more particularly to horses glutted with food, and which use little exercise: but a month or two's running is proper for most; those especially who

have been worked hard, and have stiff limbs, swelled legs, or wind-galls. Horses whose feet have been impaired by quittors, bad shoeing, or any other accidents, are also best repaired at grass. Those lamenesses particularly required turning out to grass, where the muscles or tendons are contracted or shrunk; for by the continual gentle exercise in the field, with the assistance of a patten-shoe on the opposite foot, the shortened limb is kept on the stretch, the wasted parts are restored to their ordinary dimensions, and the limb again recovers its usual tone and strength.

The fields which lie near great towns, and are much dunged, are not proper pasture for horses; but on observation appear very injurious to them, if they feed thereon all the summer.

Horses may be kept abroad all the year, where they have a proper stable or shed to shelter them from the weather, and hay at all times to come to. So treated, they are seldom sick; their limbs are always clean and dry; and, with the allowance of corn, will hunt, and do more business than horse kept constantly within doors. If horses, when taken from grass, should grow hot and costive, mix bran and chopt hay with their corn; and give them sometimes a feed of scalded bran for a fortnight, or longer: let their exercise and diet be moderate for some time, and increase both by degrees.

When horses are soiled in the stable, care should be taken that the herbage is young, tender, and full of sap; whether it be green barley, tares, clover, or any thing else the season produces; and that it be cut fresh once every day at least, if not oftener.

When horses lose their flesh much in soiling, they should in time be taken to a more solid diet: for it is not in soiling as in grazing; when, though a horse loses his flesh at first, yet after the grass has purged him, he soon grows fat. Young horses, who have not done growing, must be indulged more in their feeding, than those come to their maturity; but if their exercise is so little as to make it necessary to abridge their allowance of hay, a little fresh straw should constantly be put in their racks, to prevent their nibbling the manger, and turning crib-biters; they should also be sometimes strapped back in order to cure them of this habit.

It is obvious to every one, what care should be taken of a horse after violent exercise, that he cool not too fast, and drink no cold water, &c. for which reason we shall wave particular directions. Most horses fed for sale, have the interstices of their muscles so filled with fat, that their true shapes are hardly known. For which reason a horse just come out of the dealer's hands, should at first be gently used. He ought to lose blood, and have his diet lowered, though not too much: walking exer-

cise is most proper at first, two hours in a day ; in a week or fortnight two hours at a time, twice a day ; after this usage for a month, bleed him again, and give him two or three times a week scalded bran, which will prepare him for purging physic, that may now be given safely, and repeated at the usual intervals.

When a horse comes out of a dealers's hands, his cloathing must be abated by degrees, and care taken to put him in a moderately warm stable ; otherwise the sudden transition would be attended with the worst consequences.

BLEEDING, PURGING, &c.

HORSES who stand much in the stable, and are full fed, require bleeding now and then ; especially when their eyes look heavy, dull, red and inflamed ; as also, when they feel hotter than usual, and mangle their hay. Young horses should be bled when they are shedding their teeth, as it takes off those feverish heats they are then subject to. But the cases that chiefly require bleeding, are colds, fevers of most kinds, fall, bruises, hurts of the eyes, strains, and all inflammatory disorders, &c. It is right to bleed a horse, when he begins to grow fleshy at grass, or at any other time when he looks heavy : and it is generally proper to bleed before purging. Let your horse always be bled by measure, that you may know what quantity you take away : two or three quarts are always enough at one

time; when you repeat it, allow for the disorder and the horse's constitution. Let the blood when cold, be carefully examined, both as to colour and consistence, whether black, florid, sizey, &c.

Purging is often necessary in gross full horses, in some disorders, of the stomach, liver, &c. but should be directed with caution. Before a purge is given to any horse, it is necessary some preparation should be made for it, in order to render the operation more safe and efficacious: thus a horse that is full of flesh should first be bled, and at the same time have his diet lowered for a week, especially those that have been pampered for sale; several mashes of scalded bran should also previously be given, in order to open the bowels, and unload them of any indurated excrement, which sometimes proves an obstacle to the working of the physic, by creating great sickness and griping.

Let it be remembered, that a horse is purged with difficulty; that the physic generally lies twenty-four hours in the guts before it works; and, that the tract of bowels it has to pass through, is above thirty yards, and lying horizontally, consequently resinous and other improper drugs may, and often do, by their violent irritations, occasion excessive gripings and cold sweats, shave off the very mucus or lining of the guts, and bring on inflammations, which often terminate in mortifications, and death. It is remarkable too,

that the stomach and guts of a horse are but thin, compared to some other animals of the same bulk, and therefore must be more liable to inflammation and irritation. Horses kept much in the stable, who have not the proper benefit of air and exercise in proportion to their food, should in spring have a mild purge or two after a previous preparation by bleeding, lowering their diet, and scalded mash. Horses that fall off in their stomach, whether it proceeds from too full feeding, or ingendering crudities and indigested matter, should have a mild purge or two. Horses of a hot temperament, will not bear the common aloetic purges; their physic therefore should be mild and cooling. Purging is always found very beneficial in stubborn dry coughs; but mild mercurials joined with them, make them yet more efficacious. Horses of a watery constitution, who are subject to swelled legs, that run a sharp briny ichor, cannot have the causes removed any way so effectually as by purging. The first purge you give a horse should be mild, in order to know his constitution. It is a mistaken notion, that if a proper prepared purge does not work to expectation, the horse will be injured by it; for though it does not pass by stool, its operation may be more efficacious as an alterative to purify the blood, and it may pass by urine or other secretions. Purging medicines are very successfully given in small quantities, mixed with others; and act then as alteratives. If mercurial physic

is given, care should be taken that it be well prepared ; and warmer clothing and greater circumspection are then required. Purges should be given early in the morning upon an empty stomach : about three or four hours after the horse has taken it, he should have a feed of scalded bran ; and a lock or two of hay may then be put into his rack. The same day give him two more mashes ; but should he refuse warm meat, he may be allowed raw bran. All his water should be milk-warm, and have a handful of bran squeezed in it ; but if he refuses to drink white water, give it him without bran. Early the next morning give him another mash ; but if he refuses to eat it, give him as much warm water as he will drink : let him be properly cloathed and rode gently about. This should be done two or three times a day, unless he purges violently ; once or twice will then be sufficient : at night give him a feed of oats mixed with bran. During the working, a horse should drink plentifully ; but, if he will not drink warm water, he must be indulged with cold, rather than not drink at all.

We shall here insert some general forms of purges.

TAKE socotorine aloes ten drams, jalap and salt of tartar each two drams, grated ginger one dram, oil of cloves thirty drops ; make them into a ball with syrup of buckthorn.

Or the following, which has an established character among sportsmen :

TAKE aloes from ten drams to an ounce and an half, myrrh and ginger powdered each half an ounce, saffron and oil of anniseed each half a dram.

Mr. Gibson recommends the following :

TAKE socotorine aloes ten drams, myrrh finely powdered half an ounce, saffron and fresh jalap in power of each a dram ; make them into a stiff ball with syrup of roses, then add a small spoonful of rectified oil of amber.

The socotorine aloes should always be preferred to the Barbadoes or plantation aloes : though the latter may be given to robust strong horses, but even then should always be prepared with the salt or cream of tartar, which, by dissolving its parts, prevents its adhesion to the coats of the stomach and bowels : from whence horrid gripings, and even death itself has often ensued. This caution is well worth remarking, as many a horse hath fallen a sacrifice to the neglect of it.

Half an ounce of Castile soap, to a horse of a gross constitution, may be added to any of the above; and the proportions may be increased for strong horses.

When mercurial physic is intended, give two drams of calomel over night, mixed up with half an ounce of diapente and a little honey, and the purging ball the next morning.

The following, when it can be afforded, is a very gentle and effectual purge, particularly for fine delicate horses; and if prepared with Indian rhubarb, will not be expensive.

TAKE of the fine socotorine aloes one ounce, rhubarb powdered half an ounce or six drams, ginger grated one dram; make into a ball with syrup of roses.

The following purging drink may be given with the utmost safety; it may be quickened, or made stronger, by adding an ounce more senna, or two drams of jalap;

TAKE senna two ounces; infuse it in a pint of boiling water two hours, with three drams of salt of tartar; pour off, and dissolve in it four ounces of Glauber's salts, and two or three of cream of tartar.

This last Physic is cooling, easy, and quick in its operation; and greatly preferable in all inflammatory cases to any other purge, as it passes into the blood, and operates also by urine. When horses lose their appetites after purging, it is necessary to give them a warm stomach-drink made of an infusion of camomile flowers, anniseeds, and saffron; or the cordial ball may be given for that purpose. Should the purging continue too long, give an ounce of diascordium in an English pint of Port-wine; and repeat it once in twelve hours, if the purging continues. Plenty of gum-arabic water should also be given; and, in

case of violent gripes, fat broth glysters, or tripe liquor, should be often thrown up, with a hundred drops of laudanum in each.

The arabic solution may be thus prepared :

TAKE of gum arabic and tragacanth of each four ounces, juniper-berries and carraway-seeds of each an ounce, cloves bruised half and ounce ; simmer gently in a gallon of water, till the gums are dissolved : give a quart at a time in half a pail of water ; but if he will not take it freely this way, give it him often in a horn.

When a purge does not work, but makes the horse swell, and refuse his food and water, which is sometimes the effect of bad drugs or catching cold, warm diuretics are the only remedy ; of which the following are recommended :

TAKE a pint of white-wine, nitre one ounce ; mix with it a dram of camphire, dissolved in a little rectified spirit of wine ; then add two drams of oil of juniper, and the same quantity of unrectified oil of amber, and four ounces of honey or syrup of marsh-mallows.

When a horse swells with much physic, do not suffer him to be rode about till he has some vent ; but rather lead him gently in hand till some evacuation is obtained. As it is observed that horses more willingly take sweet and palatable things than those that are bitter and of

an ill taste care should be taken that the latter be given in balls, and that their drinks be always contrived to be as little nauseous as possible, and sweetned either with honey or liquorice. Those that are prepared with gross powders are by no means so agreeable to a horse, as those made by infusion; as the former often clam the mouth, irritate the membranes about the palate and throat, and frequently occasion the cough they are intended to prevent. Balls should be of an oval shape, and not exceed the size of a pullet's egg: when the dose is larger, it should be divided into two: and they should be dipt in oil, to make them slip down the easier. As we have given some general forms of purges, we shall observe the same rule in regard to glysters, with some few cautions and remarks.

Some writers on this subject, recommend previous to the administration of glysters in costive disorders, the passing of a small hand well oiled up the horse's fundament, in order to bring away any hardened dung, which otherwise would be an obstacle to the glyster's passage: But we do not approve of this practice. A bag and pipe of a proper form is to be preferred to a syringe, which throws up the glyster with so much force, that it often surprises a horse, and makes him reject it as fast as it goes in; whereas the liquor, when pressed gently from the bag, gives him no surprise or

uneasiness, but passes easily up into the bowels, where it will sometimes remain a long time, and be extremely useful, by cooling and relaxing them; and will sometimes so incorporate with the dung, as not easily to be distinguished from the other contents of the guts. These emollient glysters are extremely serviceable in most fevers, and greatly preferable to purging ones; which in general are too pungent, and stimulate too much, especially if aloes are a part of the composition.

Nutritive glysters are very necessary, and often save a horse from starving when his jaws are so locked up by convulsions that nothing can be conveyed by the mouth. They should not exceed a quart or three pints at a time but be often repeated: nor should they be too fat, but made of sheeps heads, trotters, or any other meat-broths, milk-pottage, rice-milk strained, and many other such nourishing things. For an emollient glyster, take the following:

TAKE marshmallows and camomile flowers each a large handful, bay-berries and sweet-fennel seeds bruised each an ounce; boil in a gallon of water to three quarts, pour off into a pan, and dissolve in it half a pound of treacle and a pint of linseed oil, or any common oil.

To make it more laxative add four ounces of lenitive electuary, or the same quantity of cream of tartar, or common purging salts.

Purging Glyster.—TAKE two or three handfuls of marshmallows, senna one ounce, bitter apple half an ounce, bay-berries and anniseeds bruised each an ounce; salt of tartar half an ounce; boil a quarter of an hour in three quarts of water; pour off, and add four ounces of syrup of buckthorn, and half a pint of oil.

This glyster will purge a horse pretty briskly; and may be given successfully, when an immediate discharge is wanting; especially in some fevers with inflamed lungs, or other disorders, which require speedy relief. But it is necessary to caution gainst a solution of coarse aloes for this purpose, as it has been found to gripe horses violently, and excite feverish and sometimes convulsive symptoms; and indeed pungent and stimulating medicines, as the stronger purgatives generally are, should be given in this form with great caution. But the generality of emollient glysters, may be prepared with much less trouble; as two quarts of water-gruel, with half a pound of treacle, a pint of oil, and a handful of common salt, will as effectually answer every purpose. The following is a restringent glyster:

TAKE pomegranate-bark or oak-bark two ounces, red-rose leaves fresh or dry a handful, balaustines an ounce; boil in two quarts of water, till one is near consumed; pour off, and dissolve in it four ounces of dias-

cordium ; to which may be added a pint of port-wine.

This will answer in all common cases where restringents are necessary, but should never be given in larger quantities; for the longer glysters of this kind lie in the bowels, the more efficacious they are. With respect to the diseases incident to the horse, by classing together those which bear a resemblance to each other, and of course require a similar mode of treatment, we shall preserve a due order of arrangement, as well as render the subject more intelligible to the reader.

CLASS I.

Strains—Wind-galls—Spavins—and Splents.

SECT. I.

STRAINS.



ALL violent strains of the ligaments, which connect the bones together, especially those of the thigh, require time, and turning out to grass, to a perfect recovery. External applications can avail but little here, the parts affected lying too deep, and so surrounded with muscles that medicine cannot penetrate to them. The sooner, in these cases, a horse is turned out to grass, the better; as the gentle motion in the field will prevent the ligaments and joint-oil from thickening, and of course the joint itself from growing stiff. When a horse's shoulder is over strained, he does not put out that leg as the other; but to prevent pain, sets the sound foot hardly on the ground to save the other; even though he be turned short on the lame side, which motion tries him the most of any. When trot-

ted in hand, instead of putting his leg forward in a right line, he forms a circle with the lame leg; and when he stands in the stable, that leg is advanced before the other. In order to cure this lameness, first bleed him; and let the whole shoulder be well bathed three times a-day with hot verjuice or vinegar, in which may be dissolved a piece of soap; but if the lameness continues without swelling, or inflammation, after resting two or three days, let the muscles be well rubbed for a considerable time, to make them penetrate, with good opodeldoch, or either of the following mixtures:

TAKE camphorated spirit of wine, two ounces; oil of turpentine, one ounce; this proportion will prevent the hair coming off. Or, Take the best vinegar, half a pint; spirit of vitriol, and camphorated spirit of wine of each two ounces.

When the shoulder is very much swelled, it should be fomented with woollen cloths (large enough to cover the whole) wrung out of hot verjuice and spirit of wine; or a fomentation prepared with a strong decoction of wormwood, bay-leaves, and rosemary, to a quart of which may be added half a pint of spirit of wine. Where poultices can be applied, they are at first undoubtedly very effectual, after bathing with hot vinegar or verjuice; and are to be preferred greatly to cold charges, which, by drying so soon on the part, keep it stiff and

uneasy : let them be prepared with oatmeal, rye flour, or bran boiled up in vinegar, strong beer or red wine lees, with lard enough to prevent their growing stiff; and when by these means the inflammation and swelling are brought down, bathe the part twice a-day with either of the above mixtures, opodeldoch, or camphorated spirit of wine; and roll the part three or four inches, both above and below, with a strong linen roller, of about two fingers width; which contributes not a little to the recovery, by bracing up the relaxed tendon; and perhaps is more to be depended on than the applications themselves. Strains of the back sinews are very common; and are easy discovered by the swelling, which extends sometimes from the backside of the knee down to the heel, but for the most part the horse sets that foot before the other. The tendon should be well bathed three or four times a day with hot vinegar; and if much swelled, apply the poultices above recommended; and when the swelling is down, bathe with the mixtures above; or with camphorated spirit of wine and oil of amber, in which is dissolved as much camphor as the spirits will take up; and roll up the tendon with a proper bandage, or laced stocking; which last, properly fitted to the limb, might be wore to great advantage, not only in these sort of injuries, but in most others, where there is a disposition to the grease, or other swelling of the limbs, from weak and relaxed fibres. Curriers shavings

wetted with vinegar have been found useful for this purpose, as have also tar and spirit of wine; but where the tendons have suffered by repeated injuries of this kind, the case will demand blistering, and proper rest. Strains of the knees and pasterns arise frequently from kicks or blows; if they are much swelled, apply first the poultices; and when the swelling is abated, bathe with the above. Many writers recommend firing in this case as well as others. But it is a practice we can by no means approve, as we heartily concur with Mr. Taplin in opinion, that this truly disagreeable and distressing alternative should never be adopted, till all the more gentle applications have repeatedly failed in effect.

SECT. II.

WIND GALLS.

A Wind-gall is a flatulent swelling, which yields to the pressure of the finger, and recovers its shape on the removal thereof: the tumour is visible to the eye, and often seated on both sides of the back sinew, above the fetlocks, on the fore-legs, but most frequently on the hind-legs; though they are met with in various parts of the body, wherever membranes can be so separated, that a quantity of air and serosities may be included within their duplicatures. When they appear near



the joints and tendons, they are generally caused by strains, or bruises on the sinews, or the sheath that covers them; which by being overstretched, have some of their fibres ruptured; whence probably may ouze out that fluid which is commonly found with the including air; though, where these swellings shew themselves in the interstices of large muscles, which appear blown up like bladders, air alone is the chief fluid; and these may safely be opened, and treated as a common wound. On the first appearance of wind-galls, their cure should be attempted by restringents and bandage; for which purpose, let the swelling be bathed twice a-day in vinegar, or verjuice alone; or let the part be fomented with a decoction of oak-bark, pomegranate, and alum boiled in verjuice, binding over it, with a roller, a woollen cloth soaked in the same. Some for this purpose, use red-wine lees, others curriers shavings wetted with the same, or vinegar, bracing the part up with a firm bandage. If this method, after a proper trial, should not be found to succeed, authors have advised the swelling to be pierced with an awl, or opened with a knife: but mild blistering has in general the preference given to these methods; the included fluids being drawn off, the impacted air dispersed, and the tumour gradually diminished.

SECT. III.

S P A V I N S.

THESE are of two species, denominated the blood and bone spavin. A blood-spavin is a swelling and dilatation of the vein that runs along the inside of the hough, forming a little soft swelling in the hollow part, and is often attended with a weakness and lameness of the hough. The cure should be first attempted with the restringents and bandage above recommended, which will contribute greatly to strengthen all weaknesses of the joints, and frequently will remove this disorder if early applied : but if by these means the vein is not reduced to its usual dimensions, the skin should be opened, and the vein tied with a crooked needle and wax-thread passed underneath it, both above and below the swelling, and the turged part suffered to digest away with the ligatures : for this purpose, the wound may be daily dressed with turpentine, honey, and spirit of wine, incorporated together.

Without entering into the cause of the bone spavin, which is a bony excrescence, or hard swelling, growing on the inside of the hough of a horse's leg, we shall content ourselves with describing the different kinds thereof by their symptoms, and then enter on their

cure. If a fulness on the fore-part of the hock comes upon hard riding, or any other violence, which threatens a spavin; in that case, such coolers and repellers are proper, as are recommended in strains and bruises. Those happening to colts and young horses are generally superficial, and require only the milder applications; for it is better to wear them down by degrees, than to remove them at once by severe means. Various are the prescriptions for the blistering ointment; but the following, on proper experience, stands well recommended by Mr. Gibson.

TAKE nerve and marsh-mallow ointment, of each two ounces; quicksilver, one ounce, thoroughly broke, with an ounce of Venice turpentine; Spanish flies powdered, a dram an a half; sublimate, one dram; oil of organum, two drams.

The hair is to be cut as close as possible, and then the ointment applied pretty thick over the part; this should be done in the morning, and the horse kept tied up all day without any litter till night; when he may be untied, in order to lie down; and a pitch or sticking plaster may be laid over it, and bound on with a broad tape or bandage to keep all close. After the blister has done running, and the scabs begin to dry and peel off, it may be applied a second time, in the same manner as before; this second application generally taking greater effect than the first, and in colts

and young horses makes a perfect cure. When the spavin has been of long standing, it will require to be renewed, perhaps, five or six times: but after the second application, a greater distance of time must be allowed, otherwise it might leave a scar, or cause a baldness; to prevent which, once a fortnight or three weeks is often enough: and it may in this manner be continued six or seven times, without the least blemish, and will generally be attended with success. But the spavins that put out on older or full-aged horses are apt to be more obstinate, as being seated more inward; and when they run among the sinuosities of the joint, they are for the most part incurable, as they then lie out of the reach of applications, and are arrived to a degree of impenetrable hardness.

SECT. IV.

S P L E N T S.

THESE are hard excrescences that grow on the shank bone, and are of various shapes and sizes. Some horses are more subject to splents than others; but young horses are most liable to these infirmities, which often wear off and disappear of themselves. Few horses put out splents after they are seven or eight years old, unless they meet with blows or accidents. A splent that arises in the middle of the shank bone is not dangerous; but

those that arise on the back of this bone, when they grow large and press against the back sinew, always cause lameness or stiffness, by rubbing against it ; the others except they are situated near the joints, seldom occasion lameness. As to the cure of splents, the best way is not to meddle with them, unless they are so large as to disfigure a horse, or are so situated as to endanger his going lame. Splents in their infancy, and on their first appearance, should be well bathed with vinegar, or old verjuice : which by strengthening the fibres, often put a stop to their growth ; for the membrane covering the bone, and not the bone itself, is here thickened ; and in some constitutions purging, and afterwards diuretic drinks, will be a great means to remove the humidity and moisture about the limbs, which is what often give rise to such excrescences. Various are the remedies prescribed for this disorder ; the usual way is to rub the splent with a round stick, or the handle of a hammer, till it is almost raw, and then touch it with oil of origanum. Others lay on a pitch plaster, with a little sublimate, or arsenic, to destroy the substance ; some use oil of vitriol ; some tincture of cantharides : but Taplin objects to all these methods, and observes that the only expectations of cure without anxiety and difficulty, is to be careful in observing such appearances in their early state ; and then seeing that friction is used twice a day for a considerable

time, with the utmost force of the hand, with a portion of the following liniment, leaving a pledget of tow wet with the same, bound on pretty firm, with two yards of wide tape as a roller :

TAKE camphorated spirit of wine and spirit of turpentine, of each two ounces (a quarter of a pound) mix together. Or, oil of origanum and spirit of turpentine, each half an ounce ; camphorated spirit of wine, two ounces.

If these repellents fail, he recommends the following method : Procure two ounces of the strongest mercurial ointment, and let the size of a hazel nut be rubbed in upon the part affected, every night and morning till the whole is consumed, using the roller each night, and taking it off in the morning. He adds, if this does not succeed, the best and most speedy method will be immediate extirpation, by making a longitudinal incision (without *bruising*, *hammering*, &c. as recommended by some) through the integuments, dissecting and extracting the substance, compleating the cure by taking up a couple of stiches, and treating it as a superficial wound. The same author further observes, that Bartlet's system of purging balls and diuretic drinks, may be adopted by those whose credulity can conceive that a course of purgatives and diuretics will contribute to the removal of corns and warts from the feet and hands of the human species.

CLASS II.

*Grease—Running Thrushes—Sand-cracks—
Surfeits—The Farcin or Farcy.*

SECT. V.

GREASE.

IN order to treat this disorder with some propriety, we shall consider it as arising from two different causes: a fault or relaxation in the vessels, or a bad disposition in the blood and juices. We must here observe, that the blood and juices or humours (for their are always some in the best state of blood) are brought to the extreme parts by the artieries, and returned by the veins; in which latter, the blood is to rise in perpendicular columns, to return the circulating fluids from the extremities; hence swellings in the legs of horses may easily be accounted for, from a partial stagnation of the blood and juices in the finer vessels, where the circulation is most languid; and especially when there is want of due exercise, and a proper muscular compression on the vessels, to push forward the returning blood, and propel the inert and half-stagnating fluids through their vessels; in short, the

blood in such cases cannot so readily ascend as descend, or a greater quantity is brought by the arteries than can be returned by the veins. The grease then considered in this light, must be treated as a local complaint, where the parts affected are alone concerned, the blood and juices being yet untainted, and in good condition: or as a disorder where they, are both complicated; but when it is an attendant on some other distemper, as the farcy, yellows, dropsy, &c. such diseases must first be cured before the grease can be removed. In the former case, moderate exercise, proper dressing, cleanliness, and external application, will answer the purpose; in the latter, internals must be called in to our assistance, with proper evacuations. When a horse's heels are first observed to swell in the stable, and subside or go down on exercise; let care be taken to wash them very clean every time he comes in, with soap-suds, chamber-lye, or vinegar and water; which, with proper rubbing, will frequently prevent, or remove, this complaint; or let them be well bathed twice a day with old verjuice, or the following mixture, which will brace up the relaxed vessels; and if rags dipped in the same are rolled on, with a proper bandage, for a few days, it is most likely the swellings will soon be removed by this method only, as the bandage will support the vessels till they have recovered their tone. To answer this end, also, a laced stocking made of strong canvas or coarse cloth, neatly fitted

to the part, would be found extremely serviceable, and might easily be contrived by an ingenious mechanic.

TAKE rectified spirit of wine, four ounces; dissolve in it half an ounce of camphor; to which add wine-vinegar, or old verjuice, six ounces; white vitriol, dissolved in a gill of water, one ounce; mix together, and shake the phial when used.

But if cracks, or scratches are observed, which ouze and run, let the hair be clipped away, as well to prevent a lodgment (which becomes stinking and offensive by its stay), as to give room for washing out dirt, or gravel, which, if suffered to remain there, would greatly aggravate the disorder. When this is the case, or the heels are full of hard scabs, it is necessary to begin the cure with poultices, made either of boiled turnips and lard, with a handful of linseed powdered; or oatmeal and rye-flour, with a little common turpentine and hogs-lard, boiled up with strong beer grounds or red-wine lees. The digestive ointment being applied to the sores for two or three days, with either of these poultices over it, will, by softening them, promote a discharge, unload the vessels, and take down the swellings; when they may be dried up with the following;

TAKE white vitriol and burnt alum, of each two ounces; Ægyptiacum, one ounce; lime-

water, a quart or three pints; wash the sores with a sponge dipped in this, three times a-day; and apply the common white ointment spread on tow, to an ounce of which may be added two drams of sugar of lead.

We would recommend the nitre-balls given to the quantity of two ounces a-day, for a month or six weeks, mixed up with honey, or in his feeds; take the following also for that purpose:

Yellow rosin, four ounces; salt of tartar, and sal prunella, of each two ounces; Venice soap, half a pound; oil of juniper, half an ounce; make into balls of two ounce weight, and give one every morning.

If the diuretic balls should not succeed, they must be changed for the antimonial and mercurial alteratives, but turning a horse out in a field, where he has a hovel or shed to run to at pleasure, would greatly contribute to quicken the cure, and indeed would in general effect it alone; but if this cannot be complied with let him be turned out in the day-time. If the horse is not turned out, a large and convenient stall is necessary, with good dressing and care.

SECT. VI.

RUNNING THRUSHES.

A Running Thrush (or Frush), is a discharge of a fetid, and sometimes ichorous, matter, from the cleft in the middle of the frog, affecting one, frequently both, and in some cases all the four feet. But, generally, the fore-feet are most subject to this disease. To explain this more particularly, there is in the middle of the frog, a cleft or opening, by which the heels in a natural state have a small degree of contraction and expansion, especially when the horse treads or presses his heel upon the ground, the frog then expands; when, therefore, a horse is shod with concave or hollow shoes, the heels are deprived of that power of expansion, being constantly confined in a contracted state by the resistance from the outer edges of the concave shoe, by which the frog is pressed or squeezed on both sides, by the crust of the heels being brought nearer to or almost into contact with one another. Hence pain, inflammation, and obstruction of the blood, &c. (in the fleshy substance of the frog, and of course that wasting and rottenness of its ex-

ternal covering, which, falling off in pieces, leaves the quick almost bare : the new frog, growing in detached pieces, never acquires the solidity of the former ; and hence that rawness and tenderness which ever afterwards remain, and that extreme sensibility of pain when any hard substance touches that part of the foot, and of course subjects the horse to frequent lameness. But in those hoofs which are wide and open at the heels, where the complaint is recent, one or both the fore-feet only being affected, and where there is reason to suspect that it proceeds from the use of concave or hollow shoes, or keeping the hoofs too hot, dry and hard, it may be completed with ease and safety, by laying aside the use of concave shoes, washing the frogs clean after exercise, and dressing them with *Mel Egyptiacum*, made as follows :

Mel Egyptiacum. Verdigris in fine powder, two ounces ; honey six ounces ; vinegar, four ounces ; boil them on a gentle fire till they have acquired a reddish colour.

But at the same time, recourse must be had to internal remedies by way of revulsion as purging or diuretic medicines, bleeding being first premised : if the former is made choice of, twice or thrice will be sufficient, repeated at proper intervals ; but if the latter, which seems preferable, they may be continued for some time with great safety, without losing one day's work of the horse. In horses of a

gross habit of body, especially the heavy draught kind, running thrushes sometimes degenerate into what is commonly called a canker. In this case the horny substance of the frog is soon thrown off; the fleshy parts grow to an immoderate size, the luxuriant substance or spongy flesh having a great number of papillæ, or tubercles of a pale red, and sometimes variegated and tinged with blood; attended with a copious discharge of a thin ichorous fetid humour, having a most offensive smell. If its progress be not speedily stopt, the fleshy sole, from its vicinity, becomes likewise affected; the horny side rots, decays, and falls off; the whole foot turns into a kind of quag or bog, (in warm weather full of maggots, which it is almost impossible to prevent, even with the most corrosive dressings); the tendons become likewise affected, the bones carious, the hoof falls off, and the horse is rendered useless. As to external applications, the first thing necessary to be done, is to pare down the crust till it is lower than the fungus, or growth of the canker, and to remove any hard pieces of the hoof or sole wherever it presses upon the tender parts; the circular part of the crust should be surrounded and kept soft with an emollient poultice. For dressings, the mildest escharotic powders may be first tried, as the following :

TAKE burnt alum powdered, two ounces;
Blue vitriol powdered one ounce.

But, when it degenerates into the last species mentioned above, affecting the fleshy sole, &c. the strongest corrosive applications will then be necessary, and sometimes hardly sufficient to keep down the luxuriance of the fungus. The caustic oils are found preferable, as ol. vitriol, aquafortis, butter of antimony, either of these may be applied once every day; otherwise if neglected dressing too long, or to every other day, which is the common practice, the great humidity and moisture issuing from the fungus so weaken the force of the strongest oils, that they have little or no effect: when these sharp dressings seem to gain upon the canker, it may be dressed with equal parts of red precipitate and burnt alum pounded and mixed together, till such time as the new sole begins to grow; the purging or diuretic medicines being given at proper intervals till the cure is compleated.

SECT. VII.

SAND CRACKS.

AS sand and gravel are easily admitted into chinks, or cracks, where, being accumulated and pent up, they irritate and inflame the parts, whereby matter is formed underneath the hoofs, which causes lameness, and which not unfrequently breaks out at the coronet, producing the most inveterate ulcers, which

become extremely difficult to heal, on account of the sinus or fistula branching out in different directions underneath the hoof. Therefore, horses with this defect should be carefully observed, and when the thick hardened edges of the chinks or cracks grow too high, by which it is so much the deeper, and of course, lodges the greater quantity of sand, &c. these edges should be rasped, or pared with a crooked knife, till the seam disappears. But wherever there remains a blackness, or appearance of gravel, that part must be traced farther; always observing, if possible, to avoid drawing blood. The chink or crack thus made smooth and equal, no sand or gravel can lodge in it; and, as the parts will be tender, it will be necessary to apply an emollient poultice for some days, till the tenderness wears off. If the inflammation has been great, and matter formed in the crack, or the parts wounded by the knife in cutting its hardened edges, proud flesh may rise and jut out. In this case, the hard parts of the hoof near it are to be removed, a digestive poultice applied, and when the inflammation is abated, the proud flesh may be touched with the following corrosive powder:

TAKE blue vitriol burnt, two drams; corrosive sublimate, one dram; rubbed into powder.

Sand-cracks are generally the effect of slight or superficial wounds upon the coronet, and grow gradually downwards towards the basis of the hoof, and at last are cut or rasped off in the shoeing : when they occasion lameness from lodging sand or gravel, they must be treated in the manner already mentioned.

SECT. VIII.

S U R F E I T S.

SURFEITS arise from various causes ; but are commonly the effects of some diseases not attended to, or that have been ill cured. Taplin, with apparent reason, attributes surfeits in a great measure to suffering horses to drink immoderately of cold water when in a violent perspiration, and the blood of course in the highest degree of circulation. A horse is said to be surfeited when his coat stares, and looks rusty and dirty, though proper means have not been wanting to keep him clean. The skin is full of scales and dander, and lies thick and meally among the hair, and is constantly supplied with a fresh succession of the same, for want of due transpiration. Some horses have hurdles of various sizes, like peas or tares ; some have dry fixed scabs all over their limbs and bodies ; others a moisture, attended with heat and inflammation ; the humours

being so sharp, and violently itching, that the horses rub so incessantly, as to make themselves raw. Some have no eruptions at all; but an unwholesome look, and are dull, sluggish, and lazy: some appear only lean and hide bound; others have flying pains and lameness, resembling a rheumatism: so that in the surfeits of horses, we have almost all the different species of the scurvy and other chronical distempers. The following method is usually attended with success in the dry species. First take away three or four pounds of blood, and then give the following mild purge, which will work as an alterative, and should be repeated once a-week or ten days for some time.

TAKE socotorine aloes six drams or one ounce, gum guaiacum half an ounce, diaphoretic antimony and powder of myrrh, of each two drams; make into a ball with syrup of buckthorn.

In the intermediate days, an ounce of the following powder should be given, morning and evening, in his feeds:

TAKE native cinnabar, or cinnabar of antimony, finely powdered, half a pound; crude antimony, in fine powder, four ounces; make into 16 doses for eight days.

This medicine must be repeated till the horse coats well, and all the symptoms of

surfeit disappear. The wet surfeit, which is no more than a moist running scurvy, appears on different parts of the body of a horse, attended sometimes with great heat and inflammation; the neck oftentimes swells so in one night's time, that great quantities of a hot briny humour issue forth, which, if not allayed, will be apt to collect on the poll or withers, and produce the poll evil or fistula. This disease also frequently attacks the limbs, where it proves obstinate and hard to cure, and in some horses shows itself spring and fall. In this case bleed plentifully, avoid externally all repellers, and give cooling physic twice a week; as, four ounces of lenitive electuary, with the same quantity of cream of tartar; or the latter, with four ounces of Glauber's salts, quickened, if thought proper, with two or three drams of powder of jalap, dissolved in water gruel, and given in a morning fasting. After three or four of these purges, two ounces of nitre made into a ball with honey may be given every morning for a fortnight; and if attended with success, repeat it for a fortnight longer. The powders above mentioned may be also given with the horse's corn; or a strong decoction of guaiacum shavings or logwood may be given alone to the quantity of two quarts a-day. These, and indeed all alterative medicines, must be continued for a long time where the disorder proves obstinate. The diet should be cool and opening, as scalded bran or barley; and if the horse is hide bound,

an ounce of fenugreek seeds should be given in his feeds for a month or longer ; and, as this disorder often proceeds from worms, give the mercurial physic too, and afterwards the cinnabar powders, as before directed. But as in general it is not an original disease, but a symptom only of many, in the cure regard must be had to the first cause : thus, as it is an attendant on surfeits, fevers, worms, &c. the removal of this complaint must be variously effected.

SECT. IX.

M A N G E.

IN a mangy horse the skin is generally twany, thick and full of wrinkles, especially about the mane, the loins, and tail ; and the little hair that remains in those parts stands almost always straight out or bristly ; the ears are commonly naked and without hair, the eye and eye-brows the same ; and when it affects the limbs, it gives them the same aspect ; yet the skin is not raw, nor peels off, as in the hot inflamed surfeit. Where this distemper is caught by infection, if taken in time it is very easily cured : and we could recommend a sulphur ointment as most effectual for that purpose, rubbed in every day. To purify and cleanse the blood, give antimony.

and sulphur for some weeks after. There are a great variety of external remedies for this purpose.

TAKE of the weak mercurial ointment half a pound; sulphur vivum four ounces; white hellebore (in powder) and oil of tartar, each one ounce. To soften the ointment add a proper quantity of olive oil.

But when this disorder is contracted by low feeding, and poverty of blood, the diet must be mended, and the horse properly indulged with hay and corn. The following ointments are effectually used for this disorder rubbed into the parts affected every day.

TAKE powdered brimstone, train oil, and tar, of each equal quantities; to which may be added ginger, or white hellebore. Or, TAKE sulphur vivum half a pound, crude sal armoniac one ounce, hogs lard or oil, a sufficient quantity to form into an ointment.

SECT. X.

THE FARCIN OR FARCY.

THE farcy is properly a distemper of the blood vessels, which generally follows the track of the veins, and when inveterate, thickens their coats and integuments, so that they become like so many chords. At first, one or more small swellings, or round buds like grapes or berries, spring out over the veins, and are often exquisitely painful to the touch; in the beginning they are hard, but soon turn into soft blisters, which when broke, discharge an oily or bloody ichor, and turn into very foul and ill disposed ulcers. In some horses it appears on the the head only; in some on the external jugular; in others on the plate-vein, and runs downwards on the inside of the fore-arm towards the knee, and very often upwards towards the brisket: in some the farcy shows itself on the hind-parts, about the pasterns, and along the large veins on the inside of the thigh, rising upward into the groin, and towards the sheath; and sometimes the farcy makes its appearance on

the flanks, and spreads by degrees towards the the lower belly, where it often becomes very troublesome. This distemper being of an inflammatory nature, and in a particular manner affecting the blood-vessels, must necessarily require large bleeding, particularly where the horse happens to be fat and full of blood. This always checks the beginning of a farcy, but is of small service afterwards; and if a horse is low in flesh, the loss of too much blood sometime proves injurious. After bleeding, let the horse have four ounces of cream of tartar and lenitive electuary: which may be given every other day for a-week, to cool the blood and the body: and then give nitre three ounces a-day for three weeks or a month, and anoint the buds or swellings with the following ointment twice a-day:

TAKE ointment of elder four ounces, oil of turpentine two ounces, sugar of lead half an ounce, white vitriol powder two drams; mix together in a gally-pot.

When the farcin affects the large blood vessels, the cure is more difficult; but let it always be attempted early: therefore, on the plate, thigh, or neck veins appearing chorded, bleed immediately on the opposite side, and apply the following to the chorded viens:

TAKE oil of turpentine in a pint bottle six ounces, oil of vitriol three ounces; drop the oil of vitriol into the oil of turpentine by little at a time, otherwise the bottle will

burst ; when it has done smoaking, drop in more oil of vitriol, and so on till all is mixed.

This mixture is one of the best universals in the beginning of a farcy ; but where it is seated in loose fleshy parts, as flanks or belly, equal parts of the oil of vitriol and turpentine are necessary. Rub the parts first with a woollen cloth, and then apply some of the mixture over the buds, and wherever there is any swelling, twice a-day. Give the cooling physic every other day, and then three ounces of nitre every day, for some time. The following balls are proper in every state of the farcy ; and when the distemper has been in its infancy, before the skin was much defaced, has often cured it in a week or two, by giving them only once or twice a day : but in an old farcy they should be given for two or three months together.

TAKE of native cinnabar, or cinnabar of antimony, eight ounces ; long bithworth and gum guaiacum powdered, of each four ounces : make into a paste with honey, and form into balls of the size of a large walnut, and roll them into liquorice-powder.

Before we close this section, it is proper to lay down the symptoms of an incurable farcy, that the owners of such horses may save themselves unnecessary expence and trouble in their endeavours to obtain a cure. When a

farcy, by improper applications, or by neglect, has spread and increased, or after long continuance resisted the medicines above recommended; if fresh buds are continually sprouting forth, while the old ones remain foul and illconditioned; if they rise on the spines of the back and loins; if the horse grows hidebound, and runs at the nose; if abscesses are formed in the fleshy parts between the interstices of the large muscles; if his eyes look dead and lifeless; if he forsakes his food, and scours often, and his excrements appear thin and of a blackish colour; if the plate or thigh vein continues large and chorded after firing and other proper applications; these symptoms denote the distemper to have penetrated internally, and that it will degenerate into an incurable consumption: it is most probable also that the whole mass of fluids are tainted, and become irremediable by art.

CLASS III.

SECT. XI.

POLL-EVIL.

THE poll-evil is an abscess near the poll of a horse, formed in the sinuses between the poll-bone and the uppermost vertebræ of the neck. If it proceeds from blows, bruises, or any external violence, at first bathe the swelling often with hot vinegar; and if the hair be fretted off with an ouzing through the skin, make use of two parts of vinegar, and one of spirit of wine; but if there be an itching, with heat and inflammation, the safest way is to bleed, and apply poultices with bread, milk, and elder flowers: this method, with the assistance of physic, will frequently disperse the swelling and prevent this evil. But when the turnour is critical, and has all the signs of matter, the best method then is to forward it by applying ripening poultices, till it comes to maturity, and bursts of itself: or if opened with a knife, great care should be taken to avoid the tendinous ligament that runs along the neck under the mane; when matter is on both sides, the opening must be made on each side, and

the ligament remain undivided. If the matter flows in great quantities, resembles melted glue, and is of an oily consistence, it requires a second incision, especially if any cavities are discovered by the finger or probe; these should be opened by the knife, the orifices made depending, and the wound dressed with the common digestive of turpentine, honey, and tincture of myrrh, and after digestion, with the precipitate ointment; or wash with the following made hot, and fill up the cavity with tow soaked in it:

TAKE vinegar or spirit of wine half a pint, white vitriol dissolved in spring-water half an ounce, tincture of myrrh four ounces.

This may be made sharper by adding more vitriol; but if the flesh is very luxuriant, it should first be pared down with a knife before the application. Taplin reprobates the practice of scalding in this disease, as the farriers term it, with as much severity as he does that of firing in other cases; and recommends in the first stage of it, fomentation with warm vinegar, rubbing upon the part affected immediately after about an ounce of camphorated spirit of wine, and then bandaging over it, a double flannel dipped in vinegar, warm as before. Should the disease resist this mode of treatment, he dissuades from farther attempts by repellents to oppose the progress of nature; and recommends every means to promote supuration.

SECT. XII.

F I S T U L A.

BRUISES on the withers frequently imposthume, and for want of care turn fistulous. They arise often from pinches of the saddle, and should be treated in their early state with repellers; for this purpose bathe the tumour well with hot vinegar three or four times a-day; if that does not succeed, an ounce of oil of vitriol may be put to a quart of vinegar, or half an ounce of white vitriol dissolved in a little water, and added to same quantity. These are generally very effectual repellers for this purpose in horses, and will frequently prevent imposthumation; when the swelling is attended with heat, smarting, and little hot watery pimples, the following mixture will then be more proper to bathe with:

TAKE two ounces of crude sal ammoniac, boiled in a quart of lime-water; where that cannot be had, a handful of pearl or wood-ashes may be boiled in common water; pour off the decoction when settled, and mix with it half a pint of spirit of wine, anoint the part afterwards with linsced oil, or el-

der ointment, to soften and smooth the skin.

But when the swellings are critical, the consequence of a fever settled on this part, you must avoid the repelling method, and assit in bringing the swelling to matter, by means of suppurating poultices : experienced practioners advise, never to open these tumours till they break of themselves; for if they are opened before they are ripe, the whole sore will be spongy, and discharge a bloody ichore, which soon degenerates into a sordid ulcer. But take care to enlarge the openings, and pare away the lips, that your dressings may be applied easily; and avoid the ligament which runs along the neck to the withers; if a gathering forms on the opposite side, open it in the same manner; but take care they incline downwards, for the sake of depending orifices, and letting the matter flow off easily. For the method of dressing, we must refer to the preceding section; and if the bones should be foul, they must be dressed with tincture of myrrh till they scale off; if the fungus is very troublesome, and the discharge oily, yellow, and viscid, pledgets, soaked in the following, made hot, have been found very effectual, bathing the swelling round with spirit of wine and vinegar.

TAKE half an ounce of blue vitriol dissolved in a pint of water; oil of turpentine,

and rectified spirits of wine, of each four ounces ; white-wine vinegar, six ounces ; oil of vitriol and *Ægyptiacum*, of each two ounces.

When the cavities are truly fistulous, the callosities must be cut out, where it can be done, with a knife : and the remainder destroyed by corrosives, viz. precipitate, burnt allum, and white vitriol, as we shall observe in the following section.

SECT. XIII.

ULCERS.

WE shall not here enter into a description of each particular species of ulcers, but only lay down some directions for their general treatment ; by which means we shall avoid the usual prolixity of authors on this subject, and yet give so general an idea of the nature of ulcers, as we hope will be sufficiently instructive both of the application, and of the proper remedy to each. It may be necessary to observe, that we may often in vain pursue the best methods of cure by external applications, unless we have recourse to proper internal remedies ; for as all ulcers, difficult to heal, proceed from a particular indisposition of the blood and juices, before the former can be brought into any order, the

latter must be corrected by alteratives and sweetening medicines. The first intention in the cure of ulcers is bringing them to digest, or discharge a thick matter; which will, in general, be effected by the green ointment, or that with precipitate; but should the sore not digest kindly by these means, but discharge a gleety thin matter, and look pale, you must then have recourse to warmer dressings, such as balsam, or oil of turpentine, melted down with your common digestive, and the strong-beer poultice over them; it is proper also in these kinds of sores, where the circulation is languid, and the natural heat abated, to warm the part, and quicken the motion of the blood, by fomenting it well at the time of dressing; which method will thicken the matter and rouse the native heat of the part, and then the former dressings may be re-applied. If the lips of the ulcer grow hard or callous, they must be pared down with a knife, and afterwards rubbed with the caustic. Where soft fungous flesh begins to rise, it should carefully be suppressed in time, otherwise the cure will go on but slowly; if it has already sprouted above the surface, pare it down with a knife, and rub the remainder with a bit of caustic; and to prevent its rising again, sprinkle the sore with equal parts of burnt allum and red precipitate; or wash with the sublimate water; and dress with dry lint even to the

surface, and then roll over a compress of linen as tight as can be borne, for a proper degree of pressure, with mild applications, will always cause these spongy excrescences to subside, but without bandage the strongest will not so well succeed. If these should not succeed, the following, which is of a sharp and caustic nature, is recommended on Mr. Gibson's experience.

TAKE of Roman vitriol half an ounce; dissolve in a pint of water; then decant and pour off gently into a large quart-bottle; add half a pint of camphorated spirits of wine, the same quantity of the best vinegar, and two ounces of Egyptiacum.

This mixture is also very successfully applied to ulcerated greasy heels, which it will both cleanse and dry up. These sinuses, or cavities, frequently degenerate into fistulæ, that is, grow pipey, having the inside thickened, and lined, as it were, with a horny callous substance. In order to their cure, they must be laid open, and the hard substance all cut away; where this is impracticable, scarify them well, and trust to the precipitate medicine made strong, rubbing now and then with caustic, butter of antimony, or equal parts of quicksilver and aquafortis. Where the cure does not properly succeed, mercurial physic should be given, and repeated at proper intervals: and to cor-

rect and mend the blood and juices, the antimonial and alterative powders, with a decoction of guaiacum and lime waters, are proper for that purpose.

SECT. XIV.

WOUNDS IN GENERAL.

IN all fresh wounds made by cutting instruments, there is nothing more required than bringing the lips of the wound into contact by suture or bandage, provided the part will allow of it; for on wounds of the hips, or other prominent parts, and across some of the large muscles, the stitches are apt to burst on the horse's lying down and rising up in the stall. In such cases, the lips should not be brought close together; one stich is sufficient for a wound two inches long: but in large wounds, they should be at an inch or more distance; and if the wound is deep in the muscles, care should be taken to pass the needles proportionably deep, otherwise the wound will not unite properly from the bottom. Should the wound bleed much from an artery divided, the first step should be to secure it, by passing a crooked needle underneath, and tying it up with a waxed thread; if the artery cannot be got at this way, apply a button of lint or tow to the mouth of the bleeding vessel, dipped in a strong solution of blue vitriol, styptic water, oil of vitriol,

or hot oil of turpentine, powdered vitriol, or colcothar, &c. and remember to apply close to the mouth of the bleeding vessel, and take care that it is kept there by proper compress and bandage till an eschar is formed; otherwise it will elude your expectations, and frequently alarm you with fresh bleedings. In a memoir presented to the Royal Academy of Sciences by M. La Fosse, he gives an account of the success he had met with in stopping the bleedings of very considerable arteries in horses, by the application of the powder of puff-balls, the arteries cicatrizing by this means only, without any succeeding hæmorrhage. The lycoperdon, or puff-ball, was made use of for this purpose in human subjects, about one hundred and seventy years ago, by Felix Wurtz, a famous old surgeon in Germany; but he does not seem to have thought of trusting to it in such considerable arteries as M. La Fosse mentions, viz. those of the leg and thigh, the bleedings from which divided vessels he stopt in a few minutes by the use of this powder only. The agaric of the oak may also be used for this purpose, where it can be retained by a proper bandage. These applications, as indeed all styptics, seem to act by constringing the extremity of the vessel, or choking it up, till a grume of blood is formed internally, which plugs up the orifice; and has been found to adhere to it so as to constitute one body with the vessel.

We avoid setting down any famous receipts for fresh wounds, whether ointments, or Friar's balsam; being well assured, that, in a healthy sound constitution, nature furnishes the best balsam, and performs herself the cure, which is so often attributed to the medicine; when it is otherwise, and the blood is deprived of its balsamic state, as will appear from the aspect of the wound and its manner of healing, it must be rectified by proper internal medicines, before a good foundation for healing can be laid by any external application whatever. The lips of the wound then being brought together by the needle or bandage, it needs only to be covered with rags dipped in brandy, or a pledget of tow spread with the wound ointment; (*see Tumours*), the directions in the preceding sections being observed and the wounded part kept as much as possible from motion. Punctured wounds from thorns, or any other accidents, should be treated in the same manner; applying the beer or bread and milk poultice over the dressing, till some signs of digestion appear; and fomenting the part well every day. This method is also very successfully used to those swellings which often arise on the neck from bleeding; the sores being sprinkled with precipitate, and burnt allum powdered, to fetch out the core, or fungus, which chokes up the orifice. The usual method is to introduce a piece of vitriol, or sublimate, which often brings on a plenti-

ful discharge, fetches out the core, and makes a cure; but it is often with the loss of the vein, and it sometimes leaves a large swelling and imposthumation.

CLASS IV.

SECT. XV.

TUMOURS.

TUMOURS, or swellings, arise either from external injuries, or internal causes. Swellings caused by external accidents, as blows and bruises, should at first be treated with restringents; thus, let the part be bathed frequently with hot vinegar or verjuice; and, where it will admit of bandage, let a flannel wetted with the same be rolled on: if, by this method the swelling does not subside, apply, especially, on the legs, a poultice with red wine lees, strong-beer grounds, and oatmeal, or with vinegar, oil, and oatmeal: either of these may be continued twice a day, after bathing, till the swelling abates; when, in order to disperse it entirely, the vinegar should be changed for camphorated spirits of wine, to four ounces of which may be added one of the spirits of sal armoniac; or it may be bathed with a mixture of two ounces of crude sal armoniac boiled in a quart of chamber ley twice a day, and rags dipped in the same may be rolled on. Fomentations

made by boiling wormwood, bay leaves and rosemary, and adding a proper quantity of spirits, are often of great service to thin the juices, and fit them for transpiration; especially if the injury has affected the joints. But in bruises, where the extravasated blood will not by these means be dispersed, the shortest way is to open the skin, and let out the grumes. Critical tumours, or swellings, which terminate fevers, should by no means be dispersed; except when they fall on the pastern or coffin joint, so as to endanger them: in this case the discutient fomentation, under the article *Strain*, should be applied three or four times a-day, and a cloth or flannel frequently wrung out of the same should be bound on, in order to keep the joint continually breathing. But if the swelling fixes under the jaw, behind the ears, on the poll, withers, or in the groins and sheath, &c. it should be encouraged and forwarded by ripening poultices wherever they can be applied: oatmeal boiled soft in milk, to which a proper quantity of oil and lard is added, may answer this purpose; or the poultice recommended in the section of *Strangles*; these must be applied twice a-day, till the matter is perceived to fluctuate under the fingers, when it ought to be let out; for which purpose, let the tumour be opened with a knife or strong lancet, the whole length of the swelling, if it can be done safely; for nothing contributes so much to a

kind healing, as the matter having a free discharge, and the opening being big enough to dress to the bottom. Pledgets of tow, spread with black or yellow basilicon, or the wound ointment, and dipped in the same, melted down with a fifth part of oil of turpentine, should be applied to the bottom of the sore, and filled up lightly with the same, without cramming: it may be thus dressed once or twice a-day, if the discharge is great, till a proper digestion is procured, when it should be changed for pledgets spread with the red precipitate ointment, applied in the same manner. Should the sore not digest kindly, but run a thin water and look pale, foment, as often as you dress, with the above fomentation: and apply over your dressing the strong-beer poultice, and continue this method till the matter grows thick, and the sore florid. The following ointments will generally answer your expectations in all common cases; and may be prepared without, as well as with, the verdigrease.

TAKE Venice turpentine and bees-wax of each a pound, oil of olives one pound and a half, yellow rosin twelve ounces; when melted together, two or three ounces of verdigrease, finely powdered, may be stirred in, and kept so till cold, to prevent it subsiding.

TAKE of yellow basilicon or the above ointment, without verdigrease, four ounces; red precipitate, finely powdered, half an

ounce: mix them together cold with a knife or spatula.

It may be necessary to observe here, that the cures of most sores are effected by the simplest methods; and that it is often of much more consequence to know how to dress a sore, than what to dress it with. And in this consists indeed the chief art of this branch of surgery: for the most eminent in that profession have long since discovered, that variety of ointments and salves, are unnecessary in the cure of most wounds and sores; and they have accordingly discarded the greatest part formerly in repute for that purpose; repeated observations having taught them, that, after the digestion, nature is generally disposed to heal up the wound fast enough herself; and that the surgeon's chief care is to prevent a luxuriance, commonly called proud flesh; which all ointments, wherein lard or oil enters, are but too prone to encourage, as they keep the fibres too lax and supple; and which dry lint alone, early applied, as easily prevents, by its absorbing quality, and light compression on the sprouting fibres. As soon then as a good digestion is procured (which is known by the thickness and whiteness of the matter discharged, and the florid red colour at the bottom of the sore) let the dressings be changed for the precipitate medicine; or the sore may be filled up with dry lint alone, or dipped in lime-water with a little honey

and tincture of myrrh, or brandy, about a fifth part of the latter to one of the former: a pledget of lint, dipt in this mixture, should also be applied to the bottom of the sore, which should be filled up with others to the surface or edges, but not crammed in too hard, as before observed, nor yet applied too loosely. By this method, the sore would incarn, or heal up properly, and soft spongy flesh would be prevented or suppressed in time; whereas when ointments or salves are too long continued, a fungus, or proud flesh, is thereby so encouraged in its growth, that it requires sometime to destroy and eat it down again: a proper compress of cloth, and a linen roller, is absolutely necessary, both for this purpose, and to secure on the dressings, wherever they can conveniently be applied.

SECT. XVI.

WARBLES.—SITFAST.

WARBLES are small hard tumours under the saddle-part of the horse's back, occasioned by the heat of the saddle in travelling, or its uneasy situation. A hot greasy dish clout, at first frequently applied, will sometimes remove them. Camphorated spirits of wine are also very effectual for this purpose to disperse them, to which a little spirit of ~~sal~~ armoniac

may be added. The repellents above-mentioned are successfully applied in these cases; and if you are obliged to work the horse, take care your saddle is nicely chambered. Mr. Taplin relinquishes the idea of applying the hot greasy dish-clout, recommended by Bracken, from the difficulty and inconvenience of procuring a piece of fat beef, or gammon of bacon, in some countries, and to some pockets, and recommends the following substitute as more easily obtained.

TAKE extract of saturn half an ounce; camphorated spirits of wine, two ounces; soft water, a quarter of a pint. Mix the extract with the spirits, by shaking them well together, and then add the water. Use this till the tumour is dispelled.

A sit fast proceeds generally from a warble, and is the horse's hide turned horny; which if it cannot be dissolved and softened by rubbing with the mercurial ointment must be cut out, and treated as a fresh wound.

CLASS V.

*Colds—Cough and Asthma—Broken Wind—
Consumption.*

SECT. XVII.

COLDS.

BY taking cold, we mean that the pores and outlets of the skin, which in a natural healthy state of the body are continually breathing out a fine fluid, like the steam arising from hot water, or smoke from fire, are so far shut up, that these steams, or perspirable matter, not having a free passage through them, are hindered from going off in the usual manner; the consequence of which is, their recoiling on the blood, vitiating its quality, overfilling the vessels, and affecting the head, glands, or kernels of the neck and throat, the lungs, and other principal parts. To enumerate the various causes of colds would be endless; the most usual are, riding horses till they are hot, and suffering them to stand in that condition where the air is cold and piercing; removing a horse from a hot stable to a cold one, and too suddenly changing his cloathing, whence it is that horses often catch

such severe colds after they come out of dealers hands; and by not being carefully rubbed down when they come in hot off journeys. The signs of a horse's catching cold, are a cough, heaviness and dulness, which affect him more or less in proportion to the severity of it; the eyes are sometimes moist and watery, the kernels about the ears and under the jaws swell, the nose gleans and he rattles in his breathing; and when the cold is violent, the horse will be feverish, his flanks work, and he will both loath his hot meat and refuse his water. When these last symptoms are attended with a slimy mouth, ears, and feet cold, and a great inward soreness, there is danger of a bad fever. But when the horse coughs strong, snorts after it, is but little off his stomach, pricks up his ears, and moves briskly in his stall, dungs and stales freely, his skin feels kindly, and his coat does not stare, he is in no danger, and there will be no occasion for medicines of any kind; but you should bleed him about two quarts, keep him warm, and give him feeds of scalded bran, with as much warm water as he will drink, in order to dilute his blood. If the disorder should increase, the horse feel hot, and refuse his meat, bleed him, if strong, two quarts more, and if you are not satisfied without giving medicines, avoid, as you would poison, a farrier's drench; (which is generally composed of some hot, nauseous remedies, given in a quantity of ale; which

too often increases the fever by over-heating the blood, and palls the horse's stomach by its loathsomeness;) and instead of it, infuse two ounces of aniseed, with a dram of saffron, in a pint and a half of boiling water; pour off the clear liquor, and dissolve in it four ounces of honey, to which may be added four spoonfulls of salad oil; this drink may be given every night; or one of the following balls, provided there is no fever. in which case it always will be more eligible to give two or three ounces of nitre or sal prunella every day in his feeds or water till it is removed; but should the horse be inclined to costiveness, remember that his body should be kept open by emollient glysters, or cream of tartar dissolved in his water, to the quantity of three or four ounces a-day.

Pectoral Horse-ball. TAKE of the fresh powders of aniseed, clicampane, carraway, liquorice, turmerick, and flour of brimstone, each three ounces; juice of liquorice four ounces, dissolved in a sufficient quantity of mountain; saffron powdered half an ounce, salad-oil and honey half a pound, oil of aniseed one ounce; mix together with wheat-flour enough to make them into paste.

These balls consist of warm opening ingredients; and, given in small quantities, about the size of a pullet's egg, will encourage a free perspiration; but, in case of a fever,

should be cautiously continued. They are much more efficacious, and in all cases superior to the farriers drenches, if dissolved in a pint of warm ale. This simple method, with good nursing and hot mashes, warm water and sweating, especially about the head and throat, which promotes the running at the nostrils, will answer the most sudden colds; and when the horse feeds heartily, and snorts after coughing, moderate exercise every day will hasten his recovery. To a horse loaded with flesh, a rowel may sometimes be necessary, as may also a gentle purge or two to some, when the distemper is gone off.

SECT. XVIII.

COUGH AND ASTHMA.

THE consequence often of the preceding disorders injudiciously treated, are settled habitual coughs; which frequently degenerate into asthmas and broken wind. Nothing has more perplexed practitioners than the cure of settled coughs; the cause of which, perhaps, has been their want of attention to the different symptoms which distinguish one cough from another; for without strict observance thereof, it is impossible to find out the true method of cure. Thus if a horse's cough is of long standing, attended with loss of ap-

petite, wasting of flesh, and weakness, it denotes a consumption: and that the lungs are full of knotty, hard substances, called tubercles, which have often been discovered on dissection. If the horse is full of flesh, bleed him plentifully; if low in flesh, more sparingly; which may occasionally be repeated, on very great oppressions and difficulty of breathing, in proportionate quantities. As mercurial medicines are found remarkably useful in these cases, give a mercurial ball, with two drams of calomel, over night, and a common purge next morning; or the following, which is recommended by Mr. Gibson.

TAKE gum-galbanum, ammoniacum, and asafœtida, of each two drams, fine aloes one ounce, saffron one dram, oil of aniseed two drams, oil of amber one dram; with honey enough to form into a ball.

They may be repeated at proper intervals, with the usual cautions. In the intermediate days, and for some time after, the following ball may be given every morning.

TAKE of the pectoral or cordial ball one pound, balsm of Peru half an ounce, balsam of sulphur annisated one ounce, flowers of benjamin half an ounce, honey as much as is sufficient to form them into a paste; give the size of a pigeon's egg every morning.

Exercise in a free open air is very serviceable, and the diet should be moderate.

The following also will be found a useful remedy in obstinate dry coughs.

TAKE, gum ammoniacum, squills, and Venice soap, of each four ounces; balsam of sulphur with aniseeds one ounce, beat up into a mass, and give as the former.

Before we close this section, it may be necessary to observe here, that some young horses are subject to coughs on cutting their teeth; their eyes also are affected from the same cause. In these cases always bleed; and if the cough is obstinate, repeat it, and give warm mash; which in general, are alone sufficient to remove this complaint.

SECT. XIX.

BROKEN WIND.

THOSE who are acquainted with this disease must own that it may be reckoned among the incurable distempers of horses; and that all the boasted pretensions to cure are vain and frivolous, since the utmost skill can amount to no more than now and then palliating the symptoms and mitigating their violence. We shall therefore lay down such methods as may probably prevent this disorder, when pursued in time. But if they should

not succeed, we shall offer some remedies and rules to mitigate its force, and make a horse as useful as possible under this malady. It is usual, before a broken wind appears, for a horse to have a dry obstinate cough, without any visible sickness or loss of appetite; but on the contrary, a disposition to foul feeding, eating the litter, and drinking much water. The following balls are to be taken for some time, which have been found extremely efficacious in removing obstinate coughs.

TAKE aurum mosaicum, finely powdered, eight ounces; myrrh and elicampane, powdered, each four ounces; aniseeds and bay-berries, each an ounce: saffron half an ounce; make into balls with oxymel squila. The aurum mosaicum is made of equal parts of quick silver, tin, sal armoniac, and sulphur.

We give this medicine as strongly recommended by Mr. Gibson; but how far the aurum mosaicum may contribute to its efficacy, may perhaps be justly disputed: as a substitute in its room, therefore, for this purpose, we recommend the same quantity of powdered squils, or gum ammoniacum, or equal parts of each. Broken winded horses should eat sparingly of hay, which as well as their corn may be wetted; as this will make them less craving after water. The following alterative ball may be given once a-fortnight or three weeks: and as it operates very gently, and

requires no confinement but on those days it is given (when warm meat and water are necessary), it may be continued for two or three months.

TAKE socotorine aloes six drams; myrrh, galbanum, and ammoniacum, of each two drams; bay-berries half an ounce: make into a ball with a spoonful of oil of amber, and a sufficient quantity of syrup of buckthorn.

SECT. XX.

CONSUMPTION.

WHEN a consumption proceeds from a defect in a horse's lungs or any principal bowel, the eyes look dull; the ears and feet are mostly hot; he coughs sharply by fits; sneezes much, and frequently groans with it; his flanks have a quick motion; he gleans often at the nose, and sometimes throws out a yellowish curdled matter, and he has little appetite to hay, but will eat corn, after which he generally grows hot. As to the cure, one of the principal things is bleeding in small quantities (a pint, or pint and a half, from some horses is sufficient), which should be repeated as often as the breath is more than ordinarily oppressed. Pectorals may be given to palliate present symptoms; but as dissections have discovered both the glands of the lungs and

mesentery to be swelled, and often indurated, the whole stress lies on mercurial purges, and the following ponderous alteratives given intermediately.

TAKE native cinnabar, or cinnabar of antimony, one pound, powdered very fine, and add the same quantity of gum guaiacum and nitre; give the horse an ounce of this powder twice a-day, wetting his feeds.

The spring grass is often extremely serviceable; but the salt marshes are to be preferred, and to be more depended on than medicines; for great alterations are thereby made in the blood and juices, and no small benefit arises from open air and proper exercise.

CLASS VI.

Fevers—Worms.

SECT. XXI.

FEVERS.

THE symptoms of a fever are, great restlessness; the horse ranging from one end of the rack to the other; his flanks beat; his eyes are red and inflamed; his tongue parched and dry; his breath is hot, and smells strong; he loses his appetite, nibbles his hay, but does not chew it, and is frequently smelling to the ground; the whole body is hotter than ordinary, (though not parched, as in some inflammatory disorders;) he dungs often, little at a time, usually hard, and in small bits; he sometimes stales with difficulty, and his urine is highly coloured; and he seems to thirst, but drinks little at a time, and often; his pulse beat full and hard, to fifty strokes and upwards in a minute. The first intention of cure is bleeding, to the quantity of two quarts, if the horse is strong and in good condition; then give him a pint of the following drink, four times a-day; or an ounce of nitre, mixed up into a ball with honey, may be given thrice a-day, instead of drink, and washed

down with three or four horns of any small liquor.

TAKE of baum, sage, and camomile flowers, each a handful, liquorice-root sliced half an ounce, sal prunel or nitre three ounces; salt of worm-wood half an ounce; infuse in two quarts of boiling water; when cold, strain off, and squeeze into it the juice of two or three lemons, and sweeten with honey.

His diet should be scalded bran, given in small quantities; which if he refuses, let him have dry bran sprinkled with water: put a handful of picked hay into the rack, which a horse will often eat when he will touch nothing else; his water need not be much warmed, but should be given often and in small quantities: his clothing should be moderate; too much heat and weight on a horse being improper in a fever, which scarce ever goes off in critical sweats (as those in the human body terminate), but by strong perspiration. The various and irregular symptoms that attend this slow fever, require great skill to direct the cure, and more knowledge of the symptoms of horses diseases than the generality of gentlemen are acquainted with. The experienced farrier should therefore be consulted and attended to, in regard to the symptoms; but very seldom as to the application of the remedy, which is generally above their comprehension; though it may be readily se-

lected, by duly attending to the above observations. The true reasons, perhaps, why so many horses miscarry in fevers, are, that their masters, or doctors, will not wait with patience, and let nature have fair play; that they generally neglect bleeding sufficiently at first; and are constantly forcing down sugar sops, or other food, in a horn, as if a horse must be starved in a few days if he did not eat: then they ply him twice or thrice a-day with hot medicines and spirituous drinks, which (excepting in a very few cases) must be extremely pernicious to a horse, whose diet is naturally simple, and whose stomach and blood, unaccustomed to such heating medicines, must be greatly injured, and without doubt are often inflamed by such treatment. Before we close this section on fevers, it may be no improper hint to the curious to take notice, that a horse's pulse should more particularly be attended to than is customary, as a proper estimate may thereby be made both of the degree and violence of the fever present, by observing the rapidity of the blood's motion, and the force that the heart and arteries labour with to propel it round. The highest calculation that has been made of the quickness of the pulse in a healthy horse, is, that it beats about forty strokes in a minute; so that in proportion to the increase above this number, the fever is rising, and if farther increased to above fifty the fever is very high.

SECT. XXII.

WORMS.

AUTHORS have described three different sorts of worms that affect horses, viz. Botts, which young horses are often troubled with in the spring; the Rotundi, or those resembling earth-worms; and the Ascarides, or those about the size of the largest sewing needle, with flat heads. The symptoms of worms are various. The botts that many horses are troubled with in the beginning of the summer, are always seen sticking on the straight gut, and are often thrust out with the dung; with a yellowish coloured matter, like melted sulphur; they are no ways dangerous there; but are apt to make a horse restless and uneasy, and rub his breech against the post. For the cure of botts in the stomach, calomel should first be given in large quantities, and repeated at proper intervals; *Æthiops mineral* or some of the under-mentioned forms may be given afterwards. But botts in the straight gut may be cured by giving the horse a spoonful of *savin*, cut very small once or twice a day, in his oats or bran, moistened; and three or four cloves of garlick may be added to advantage. Give also an aloetic

purge between whiles; the following stands well recommended,

TAKE fine socotorine aloes, ten drams; fresh jalap, one dram; aristolochia, or birthwort, and myrrh powdered of each two drams; oil of savin and amber, of each one dram; syrup of buckthorn enough to form into a ball.

As the source of worms in general proceeds from a vitiated appetite and a weak digestion, recourse must first be had to mercurials, and afterwards to such things as are proper to strengthen the stomach, promote digestion, and by destroying the supposed ova, prevent the regeneration of these animals. Thus, two drams of calomel may be given with half an ounce of diapente, and mixed up with conserve of wormwood, over-night; and the next morning the above purge; these may be repeated six or eight days. Or the following mercurial purge may be given, which will be less troublesome, and no less efficacious.

TAKE crude quick silver two drams, Venice turpentine half an ounce; rub the quicksilver till no glistening appears: then add an ounce of aloes, a dram of grated ginger, thirty drops of oil of savin, and a sufficient quantity of syrup of buckthorn to make a ball.

One of these balls may be given every six days, with the usual precautions in regard to mercurial physic; and the following powder intermediately.

TAKE powdered tin and Æthiops mineral of each half an ounce; give every night in a mash, or among his corn.

CLASS VII.

Strangles—Glanders—Staggers, and Convulsive Disorders.

SECT. XXIII.

STRANGLES.

THE strangles is a distemper to which colts and young horses are subject; and begins with a swelling between the jaw-bones, which some times extends to the muscles of the tongue; and is attended with such great heat, pain and inflammation, that sometimes, till matter is formed, the horse swallows with the utmost difficulty. When it arises among his glands, and divides into several tumours, the cure is generally tedious, as it breaks in different places; and when it forms upwards on the wind-pipe and gullet, there is sometimes danger of suffocation, unless the swelling soon breaks. But the most dangerous

kind, is, when, besides the above symptoms, the horse runs at the nose; this is by some called the bastard strangles. As this disorder seems to be critical, the most approved method is to assist nature in bringing the swellings to maturity, by keeping them constantly moist with ointment of marshmallows, and covering the head and neck with a warm hood. But as all swellings in glandular parts suppurate slowly, the following poultice may be applied hot twice a-day.

TAKE leaves of marshmallows ten handfuls, white lily-root half a pound, linseed and fenugreek-seed bruised of each four ounces: boil them in two quarts of water till the whole is pulpy; and add four ounces of ointment of marshmallows, and a sufficient quantity of hogs-lard, to prevent its growing stiff and dry.

In five or six days, by these means, the matter is generally formed, and makes its way through the skin; and if the discharge is made freely and with ease, the opening need not be enlarged; but should be dressed with the following ointment spread on tow, still continuing the poultice over it to promote the digestion, and prevent any remaining hardness.

TAKE rosin and burgundy pitch of each a pound and a half, honey and common turpentine each eight ounces, yellow wax four ounces hogs-lard one pound, verdigrease

finely powdered one ounce; melt the ingredients together, but do not put in the verdigrease till removed from the fire; and it should be stirred in by degrees, till the whole is grown stiff and cool.

If the fever and inflammation run high, and the swelling be so situated as to endanger suffocation, a moderate quantity of blood must be taken away, and the remainder diluted with plenty of water gruel, or warm water, mashes, &c. The running at the nose which often attends the strangles is dangerous, especially if it continues after they have ripened and broke, as the horse will be greatly weakened thereby. To prevent this waste and decay, give him every day for some time an ounce of Jesuit's bark; or a strong decoction of guaiacum shavings, which have been found extremely beneficial in restraining these glandular discharges when too liberal, and in drying up ulcers of all kinds in horses. If a hardness remains after the sores are healed up, they may be anointed with the mercurial ointment; and when the horse has recovered his strength, purging will be necessary. The vives or ives differ from the strangles only in this; that the swellings of the kernels under the ears of the horse, (which are the parts at first chiefly affected), seldom gather, or come to matter, but by degrees perspire off and disperse by warm cloathing, anoint-

ing with marshmallow ointment, and a moderate bleeding or two. But should the inflammation continue notwithstanding those means, a suppuration must be promoted by the methods before recommended in the strangles. When these swellings appear in an old or full aged horse, they are signs of great malignity, and often of an inward decay as well as forerunners of the glanders. The mercurial ointment above-mentioned, may be prepared thus:

TAKE of crude mercury or quicksilver one ounce, Venice turpentine half an ounce; rub together in a mortar till the globules of the quicksilver are no longer visible; then add two ounces of hogs-lard.

SECT. XXIV.

GLANDERS.

THE matter, discharged from the nostrils of a glandered horse, is either white, yellow, or greenish, sometimes streaked or tinged with blood; when the disease is of long standing, and the bones are fouled, the matter turns blackish, and becomes very fetid; and is always attended with a swelling of the kernels or glands under the jaws; in every other respect the horse is generally healthy and sound, till the distemper has been of some con-

tinuance. It is always a bad sign when the matter sticks to the inside of the nostrils like glue or stiff paste; when the inside of the nose is raw, and looks of a livid or lead colour; when the matter becomes bloody, and stinks, and when it looks of an ash-colour. But when only a limpid fluid is first discharged, and afterwards a whitish matter, the gland under the jaw not increasing, and the disorder of no long continuance, we may expect a speedy cure; for in this case, which arises from taking cold after a horse has been overheated, the pituitary membrane is but slightly inflamed, the lymph in the small vessels condensed, and the glands overloaded, but not yet ulcerated. But Mr. De la Fosse, the king of France's farrier, after examining by dissection the carcasses of glandered horses, and making a strict scrutiny into the state of the viscera, assisted for that purpose by ingenious and expert anatomists, for ten years together, affirms this disease to be altogether local; and that the true seat of it is in the pituitary membrane which lines the partition along the inside of the nose, the maixillary sinuses or cavities of the cheek bones on each side the nose, and the frontal sinuses or cavities above the orbits of the eyes. But on nicely examining the heads of such horses, found the cavities above mentioned more or less filled with a viscid slimy matter and the membrane which lines both them and the nostrils inflamed, thickened, and corroded with

sordid ulcers, which in some cases had eat into the bones. He observes, that when glandered horses, discharged matter from both nostrils, both sides of the membrane and cavities were affected; but when they ran at one nostril only, that side only was found distempered. It is remarked by La Fosse, that the sublingual glands, or the kernels situated under the jaw-bone, which are always swelled in this distemper, do not discharge their lymph into the mouth, as in man, but into the nostrils: and that he constantly found their obstruction agree with the discharge: if one gland only was affected, then the horse discharged from one nostril only; but if both were, then the discharge was from both. He also adopts the plan of trepanning these cavities, and taking out a piece of bone, by which means the parts affected may be washed with a proper injection, and in fine the ulcers deterged, healed, and dried up. There are different species of the glanders, so the cure of the middle kinds may first be attempted by injections and fumigations: thus after taking cold, should a horse for fifteen or twenty days discharge a limpid fluid or whitish matter from one or both nostrils, the glands under the jaw rather growing harder than diminishing, we may expect it will degenerate into a true glanders. To prevent which, after first bleeding and treating him as usual for a cold, let an emulsion of cod-liver oil be prepared with a decoction of marjoram, rosemary, hawthorns, elder,

camomile flowers, and honey of roses, or such like, be thrown up as fast as possible with a strong syringe, and repeated three times a day; should the running not lessen or be removed in a fortnight by the use of this injection, a restraining one may now be prepared with tincture of roses, lime water, &c. and the nostrils fumigated with the powders of frankincense, mastich, amber, and cinnabar, burnt on an iron heated for that purpose; the fume of which may easily be conveyed through a tube into the nostrils.

M. de la Fosse, to whose opinion much deference has been paid by succeeding writers, distinguishes seven different kinds of glanders; and in order to support this doctrine, cites a variety of symptoms, though the disease arises from one general cause, which is purulent corrosive matter discharged from the nostrils, which, by being suffered to continue for a considerable time, brings ulceration on the parts where it is lodged. So that we cannot acquiesce with M. de la Fosse's opinion in this particular, any more than in that of trepanning, which is not only a most painful operation, but also attended with such trouble and expence; that admitting recovery, it must be an extraordinary horse to compensate the account. And we cannot but agree with Taplin in opinion, that when the disease is arrived to such a pitch, that notwithstanding every medicinal effort, the whole carcase is emaciated, and the frame sinking

under universal depression, the first loss will be ultimately best in a resignation of the hide to the collar-maker, and the remains to the hounds. Nor can we refrain from concurring with the very facetious remark of that author; on the cruelty of dooming three horses to death which had been trepanned, syringed and completely cured by M. de la Fosse, "in twenty-six days," unless we are to conceive the possibility of "putting them to death" on the twenty-sixth, to avoid their natural dissolution on the twenty-seventh.

SECT. XXV.

STAGGERS, AND CONVULSIVE DISORDERS.

FARRIERS generally include all distempers of the head under two denominations, viz. staggers and convulsions, wherein they always suppose the head primarily affected. But in treating these disorders, we shall distinguish between those that are peculiar to the head, as having there source originally thence; and those that are only concomitants of some other disease. In an apoplexy a horse drops down suddenly, without other sense or motion than a working at his flanks. All that can be done is to empty the vessels as speedily as possible, by striking the veins in several parts at once, bleeding to three or four quarts; and to raise up the horse's head and shoulders, support-

ing them with plenty of straw. If he survives the fit, cut several rowels; give him night and morning glysters prepared with a strong decoction of senna and salt, or the purging glyster mentioned in the directions; blow once a-day up his nostrils a dram of powder of asarabacca, which will promote a great discharge; afterwards two or three aloetic purges should be given; and to secure him from a relapse, by attenuating and thinning his blood, give him an ounce of equal parts of antimony and crocus metallorum for a month; or, which is preferable, the same quantity of cinnabar of antimony and gum guaiacum. As to the other disorders of the head, such as lethargy or sleeping evil, epilepsy or falling-sickness, vertigo, frenzy, and madness, convulsions, and paralytical disorders, as they are most of them to be treated as the apoplexy and epilepsy by bleeding and evacuations, with the alteratives there directed, we shall wave treat of them separately, but mention some particular rules to distinguish them, according to the plan we laid down, and then offer some general remedies for the several purposes.

In an epilepsy, or falling-sickness, the horse reels and staggers, his eyes are fixed in his head, he has no sense of what he is doing, he stales and dungs insensibly, he runs round and falls suddenly; sometimes he is quite moveable, with his legs stretched out as if he was dead, except only a quick motion of his heart and lungs, which causes a violent

working of his flanks; sometimes he has involuntary motions, and shaking of his limbs, so strong that he has not only beat and spurned his litter, but the pavement with it; and with these alternate symptoms a horse has continued more than three hours, and then has as surprisingly recovered: at the going off of the fit, he generally foams at the mouth, the foam being white and dry, like what comes from a healthful horse when he champs on the bit. But in all kinds of gripes, whether they proceed from disorders in the guts, or retention of urine, a horse is often up and down, rolls and tumbles about; and when he goes to lie down, generally makes several motions with great seeming carefulness, which shews he has a sense of his pain: and if he lays stretched out for any time, it is generally but for a short space.

The lively description of that universal cramp or convulsion, called by some the stag-eil, which seizes all the muscles of the body at once, and locks up the jaws, so that it is impossible almost to force them open is thus described. When a horse is seized, his head raised with his nose towards the rack, his ears pricked up, and his tail cocked, looking with eagerness as an hungry horse when hay is put down to him, or like a high spirited horse when he is put upon his mettle; insomuch that those who are strangers to such things, when they see a horse stand in this manner, will scarce believe any thing of consequence

ails him : but they are soon convinced, when they see other symptoms come on apace, and that his neck grows stiff, cramped, and almost immoveable : and if a horse in this condition lives a few days, several knots will arise on the tendinous parts thereof, and all the muscles both before and behind will be so much pulled and cramped, and so stretched, that he looks as if he was nailed to the pavement, with his legs stiff, wide, and straddling ; his skin is drawn so tight on all parts of the body, that it is almost impossible to move it ; and if trial be made to make him walk, he is ready to fall at every step, unless he be carefully supported ; his eyes are so fixed with the inaction of the muscles, as give him a deadness in his looks ; he snorts and sneezes often, pants continually with shortness of breath ; and this symptom increases continually till he drops down dead ; which generally happens in a few days, unless some sudden and very effectual turn can be given to the distemper. In all these cases the horse should first be bled plentifully, unless he is low in flesh, old, or lately come off any hard continued duty ; then you must be more sparing of his blood : afterwards give the following ball.

TAKE asafœtida half an ounce, Russia castor powdered two drams, valerian root powdered one ounce ; make into a ball with honey and oil of amber.

This ball may be given twice a-day at first ; and then one washed down with a decoction of misletoe or valerian sweetned with liquorice or honey : an ounce of asafoetida may be tied up in a piece of strong coarse linen rag, and put behind his grinders to champ on. The laxative purges and emollient glysters should be given intermediately to keep the body open ; but when the former balls have been taken a week or ten days, the following may be given once a day with the valerian decoction.

TAKE cinnabar of antimony six drams ; asafoetida half an ounce, aristolochia, myrrh, and bay berries, of each two drams ; make into a ball with treacle and oil of amber.

Repeated frictions are extremely serviceable in all convulsive disorders, and often prevent their being jaw set ; they should be applied with unwearied diligence every two or three hours, wherever any stiffness or contractions in the muscles appear ; for a horse in this condition never lies down till they are in some measure removed. In paralytic disorders, where the use of a limb or limbs is taken away, the internals above recommended should be given, in order to warm, invigorate, and attenuate the blood ; and the following stimulating embrocation should be rubbed in to the parts affected.

TAKE oil of turpentine four ounces, nerve ointment and oil of bays of each two

ounces, camphor rubbed fine one ounce, rectified oil of amber three ounces, tincture of cantharides one ounce.

With this liniment the parts affected should be well bathed for a considerable time, to make it penetrate; and when the hind parts chiefly are lame, the back and loins should be well rubbed with the same. To the medicines above recommended, may be added snake root, contrayerva, mustard seed, horse radish root steeped in strong beer, or wine where it can be afforded.

CLASS VIII.

SECT. XXVI.

COLICS, OR GRIPES.

THERE seems to be no distemper so little understood by the common farriers, as the colic or gripes in horses, one general remedy or method serving them in all cases: but as this disorder may be produced by very different causes: the method of cure must also vary; otherwise the intended remedy, injudiciously applied, will not only aggravate the complaint, but make it fatal. We shall divide this disorder into three different species; the flatulent or windy, the bilious or inflammatory, and the dry gripes; each of which

we shall distinguish by their different symptoms, and then point out the proper remedies. The flatulent or windy colic is thus known: The horse is often lying down, and as suddenly rising; when the gripes are violent, he will have convulsive twitches, his eyes are turned up and his limbs stretched out as if dying, his ears and feet being alternately very hot and cold; he falls into profuse sweats, and turns his head frequently to his flanks; falls down, rolls about, and often turns on his back. This last symptom proceeds from a stoppage of urine that almost always attends this sort of colic, which may be increased by a load of dung pressing on the neck of the bladder. These are the general symptoms of colic and gripes from wind, drinking cold water when hot, and when the perspirable matter is retained, or thrown on the bowels by catching cold; in all which cases they are violently distended. Cribbing horses are more particularly subject to this complaint, by reason they are constantly sucking in great quantities of air. The following ball and glyster seldom fail of giving relief in these cases.

TAKE Strasburgh or Venice turpentine, and juniper-berries pounded, of each half an ounce; salt-prunella or salt-petre, an ounce; oil of juniper, one dram; salt of tartar, two drams; make into a ball with any syrup: it may be given whole, and wash-

ed down with a decoction of juniper-berries, or a horn or two of ale.

If the horse does not break wind, or stale plentifully, he will find no relief; therefore in an hour or two give him another ball, and add to it a dram of salt of amber; which may be repeated a third time, if found necessary. During the fit the horse may be walked and trotted gently; but should by no means be harrassed beyond his ability, or dragged about till he is jaded. The following glyster may be given, between the balls, or alone, and repeated occasionally.

TAKE camomile flowers two handfuls; anise, coriander, and fennel seeds, of each an ounce; long pepper half an ounce; boil in three quarts of water to two; and add Daffy's elixir, or gin, half a pint; oil of amber half an ounce, and oil of camomile eight ounces.

The next species of colic we shall describe, is the bilious or inflammatory: which besides most of the preceding symptoms, is attended with a fever, great heat, panting and dryness of the mouth; the horse also generally throws out a little loose dung, with a hot scalding water; which when it appears blackish, or of a reddish colour, and fetid smell, denotes an approaching mortification. In this case the horse should immediately have an emollient glyster, with two ounces of nitre dissolved in

it, thrown up twice a day, to cool the inflamed bowels; plenty of gum-arabic water should be taken and a pint of the following drink given every two or three hours till several loose stools are procured, and then it should be given only night and morning till the disorder is removed.

TAKE senna three ounces, salt of tartar half an ounce: infuse in a quart of boiling water an hour or two; then strain off, and add two ounces of lenitive electuary, and four of Glauber's salts.

If this disorder is not removed by these means, but the inflammation and fever increase, attending with a discharge of the flesh coloured water above described, the event will most probably be fatal: and the chief thing to be depended on now, must be a strong decoction of Jesuit's bark, given to the quantity of a pint every three hours, with a gill of red port wine. A quart of the same may be used for a glyster, with two ounces of Venice turpentine, dissolved with the yolks of two eggs, an ounce of diascordium, and a pint of red wine, and given twice a day: if the horse recovers give two or three mild rhubarb purges. The last we shall describe is the dry gripes, or the colic, which arises often from costiveness; it is discovered by the horses frequent and fruitless motion to dung, the blackness and hardness of the dung, the frequent and quick motion of his tail, the high colour

of his urine, and his great restlessness and uneasiness. An emollient glyster should be thrown up twice a day ; and the above purging drink given, till the bowels are unloaded, and the symptoms removed. The diet for a horse in the gripes, should be scalded bran, warm water-gruel, or white water, made by dissolving four ounces of gum-arabic in a quart of water, and mixing it with his other water. From this division of gripes and colics, with their different treatment, it appears how absolutely necessary it is they should be well understood, in order to be managed skilfully ; it is plain too, that violent hot medicines should in every species of this disorder be guarded against, and given with great caution and discretion, even in the first kind of flatulent colic, where indeed they can only be wanted ; yet too often, when prepared by the farriers with oil of turpentine, geneva, pepper, brine, &c. they even increase that disorder, by stimulating the neck of the bladder, too forcibly heating the blood, and inflaming the bowels, till a mortification is brought on them. These are, in general, the constant appearances of horses that die of this disorder ; whose bowels being examined for that purpose, have been found inflamed, full of red and lived spots, sometimes quite black, crisped with extreme heat, and rotten.

SECT. XXVII.

SCOURING AND LOOSENESS.

IT is sometimes a nice matter to form a proper judgment when to controul or encourage a looseness ; but these general rules may be a direction : if a healthy full horse, on taking cold, or upon hard riding, overfeeding, eating unwholesome food, or in a slight fever, should have a moderate purging, by no means think of stopping it ; but rather encourage it with an open diet and plenty of warm gruel ; but if it continues long, with gripings, the mucus of the bowels coming away, and the horse losing his appetite and flesh, it is then high time to give him proper medicines : if he voids great quantities of slime and greasy matter, give him the following drench, and repeat it every other day for three times.

TAKE lenitive electuary and cream of tartar of each four ounces ; yellow rosin finely powdered one ounce ; and four ounces of sweet oil : mix with a pint of water-gruel.

The following alterative ball alone has been found successful for this purpose when given twice a-week, with scalded bran and warm gruel.

TAKE socotorine aloes half an ounce, diapente one ounce ; make into a ball with the juice of Spanish liquorice dissolved in water, and a spoonful of oil of amber.

To this may be added two drams of myrrh, and a dram of saffron, and (where it can be afforded) half an ounce of rhubarb. When the purging is attended with a fever, rhubarb should first be given to the quantity of half an ounce, with an ounce and half of lenitive electuary ; at night, after the working, give half an ounce or more of diascordium in a pint of red wine mulled with cinnamon ; and repeat it every day, and the rhubarb-ball once in two or three. But if the distemper increases, the horse's flanks and belly looks full and distended, and he appears griped and in pain ; let this glyster be given, and this quantity of diascordium increased an ounce in his night drink.

TAKE camomile flowers one handful, red roses half a handful, pomegranate and baulaustines of each one ounce ; boil in two quarts of water to one ; strain off, and dissolve in it two or three ounces of diascordium, and one of mithridate ; to which may be added a pint of port-wine : repeat it once a day.

If the flux continues violent, give an ounce of rock-alum, with an ounce and a half of bole, twice a-day ; or dissolve double this quantity with two ounces of diascordium, and

the cordial ball, in two quarts of hartshorn drink; to which may be added a pint of port: and give the horse three or four times a-day a pint of this drink. For this purpose also a strong decoction of oak-bark may be given, with either of the above remedies, and to the same quantity; even by itself, it will be found on trial no inconsiderable remedy. The bloody-flux is a distemper horses are not very subject to; however as it sometimes does occur, whenever blood is discharged, attended with gripings and great pain in the bowels, if the flux is not speedily restrained, the horse probably may be soon lost; we recommend therefore the following glyster and drink for that purpose.

TAKE oak-bark four ounces, tormentil-root two ounces, burnt hartshorn three ounces: boil in three quarts of forge-water to two; strain off, and add two ounces of diascordium, four ounces of starch, and half a dram of opium.

SECT. XXVIII.

DISORDERS of the KIDNEYS, BLADDERS, STRANGURY, &c.

THE signs of the kidneys being hurt or affected are, a weakness of the back and loins, difficulty of staling, faintness, loss of appetite, and deadness in the eyes; the urine is thick, foul, and sometimes bloody, especially after a violent strain. A horse diseased in his kidneys can seldom back, that is, move straight backwards, without pain, which is visible as often as he is put to the trial: the same thing is observable indeed in horses whose backs have been wrung and wrenched; but with this difference, that in the latter there is seldom any defect or alteration in the urine, except that it is higher coloured. Bleeding is the prime remedy, and, that plentifully, in order to prevent inflammation; and the more so, if a fever attends a difficulty in staling, for then we may suspect the kidneys already inflamed. A rovel in the belly has been found useful; and the following balls may be given twice or thrice a day, with a pint of marshmallow decoction, in which half an ounce of gum arabic is dissolved, with an ounce of honey.

TAKE Locatellus-balsam one ounce, spermaceti six drams, sal prunella half an ounce; mix into a ball with honey: if the urine is bloody, and half an ounce of Japan earth.

Should the fever continue, bleed largely, give emollient glysters, and the cooling opening drink. If the urine passes with difficulty and pain, notwithstanding these means, give this ball, and repeat it twice or thrice a-day till the horse stales freer and without pain, his urine become of a right consistence, and free from any purulent sediment.

TAKE balsam of capivi or Strasburgh turpentine, and Venice soap, of each one ounce, nitre six drams, myrrh powdered two drams; make into a ball with honey, and wash it down with the marshmallow decoction.

As a suppression of urine arises sometimes from an inflammation of the kidneys, so at others, from a paralytic disorder, disabling them in their office of separating the urine from the blood: in this latter case, the bladder is usually empty, so that a horse will make no motion to stale; and if he continues a few days in this condition, his body will swell to a great degree, break out in blotches all over, and death will soon close the scene. If the complaint is not removed by those means, rub the horse's reins well with two parts of oil of turpentine, and one of oil of amber; and apply a poultice of garlic, horse-

radish, mustard seed, camphor, and green soap, spread on thick cloth over them. Give the horse also two drams of calomel overnight, and a moderate purge the next morning. These perhaps are the chief and best remedies that can be given in this generally fatal disorder. When the stranguary in a horse does not arise from wind, or dung pressing on the neck of the bladder (as was observed in the section on Colics), the cause is from inflammation, or too long a retention of the urine. Such horses make frequent motion to stale, stand wide and straddling, are full and have their flanks distended. In this case bleed largely; give the following drink, and repeat it every two hours, for two or three times, till the horse is relieved.

TAKE Venice turpentine, broke with the yolk of an egg, one ounce, nitre or sal prunella six drams, half a pint of sweet oil, and a pint of wine.

If this drink should not have the desired effect, the diuretic ball above mentioned may be given in the same manner, omitting the myrrh. Give the horse plenty of the marsh-mallow decoction: in a quart of which dissolve an ounce of nitre and gum arabic, and two of honey. Horses subject to a diabetes, or profuse scaling, if old, or of a weak constitution, are seldom cured; they soon lose their flesh and appetite, grow feeble, their

coat staring, and they die rotten. Of a young horse there are more hopes; but he must not be indulged with too much water, or moist food.

CLASS. IX

SECT. XXIX.

DISEASES OF THE EYES.

IN order to make the disorders of the eyes well understood, we shall consider them as arising from different causes; external injuries affecting the globe of the eye; and from internal causes affecting the humours within the globe. We shall consider also the eye as naturally weak from a bad conformation.

In all recent disorders of the eye from external injuries, such as blows, bites, &c. attended with a swelling of the lid, and a running from the eye, you must first sponge the part often with cold spring-water and vinegar; and if much swelled bleed immediately, and apply over it a poultice made of the pulps of roasted or boiled apples, cleared from their seeds and husks; or of conserve of roses and vinegar, with a little bole, and the white of an egg. When the swelling is abated, either of the following washes will complete the cure.

TAKE white vitriol half an ounce, sugar of lead two drams; dissolved in a pint of spring water; to which may occasionally be added, when the rheum is very great, and inflammation removed, half an ounce of tutty or compound powder of ceruss.

Let the eye and eyelid be bathed three or four times a-day with a clean sponge dipped in this wash; or it may be applied with a feather, leaving a few drops on the eye. When the veins under the eye have been turgid, opening them with a lancet has often been found successful. Mr. Gibson, from his own experience, recommends the following, with which alone he has succeeded in many cases.

TAKE two drams of rose-buds, infuse them in half a pint of boiling water: when cold, pour off the infusion, and add to it twenty grains of sugar of lead.

This is to be used as the former, but the quantity of sugar of lead may occasionally be increased. Sometimes from the violence of the inflammation, repeated blows, and external injuries, the coats of the eye shall lose their transparency, thicken and turn white or of a dead colour; in the latter case, the horse has some glimmering of light; in the former he is blind while the eye continues in this state. If the horse be fleshy and of a gross constitution, bleeding may be repeated; let his diet be scalded bran or barley: avoid-

ing for some days oats, beans, or any thing hard to chew. A cooling opening drink, should be given every other day, which will answer better than aloetic purges. Let it be remembered, it has long been observed in practice, that the eye in its first state of inflammation is so very tender, that the eye-waters prepared with tutty and other powders aggravate the disorder; consequently, during this state, the tinctures of vegetables and solutions of salts are greatly preferable. When the humours of the eye are thickened, and the disorder is within the globe, sharp external applications are not only useless but extremely detrimental by the irritation they occasion, and consequently should be avoided. In all cases of this sort, whether moon-eyes, which are only cataracts forming, or in confirmed ones attended with a weeping; general evacuations, with internal alteratives, can only take place.

CLASS X.

DISEASES of the FEET.

SECT. XXX.

PRELIMINARY REMARKS.

1. *Of Greasing, Oiling, and Stuffing
Horses Hoofs.*

The custom of keeping our finest horses constantly standing upon dry litter and hot dung in the stable, is exceedingly hurtful to the feet and legs, particularly the former, which are always found to agree best with coolness and moisture. Hence we find, that horses hoofs, whilst running in the fields are always in better condition than those that are kept hot and dry in the stable, which beside being liable to many diseases, are hard, brittle, shattered, and often broken.

With respect to greasy or oily applications, so often prescribed for the hoofs of horses in order to preserve them sound, tough, &c. Mr. Clark very justly condemns them as rather pernicious than salutary.

When young horses (he observes) are first taken from the fields, their hoofs are cool,

sound, and tough. These are found from experience to be good qualities. But horses are no sooner introduced into the stable, than their hoofs are greased or oiled two or three times a-week : and if they are kept much in the house standing upon hot dry litter, without being frequently led abroad, and without having an opportunity of getting their hoofs cooled and moistened in wet ground, their hoofs grow so brittle, dry, and hard, that pieces frequently break off, like chips from a hard stone : and when driving the nails in shoeing, pieces will split off, even although the nails are made very fine and thin. Now if these same horses with brittle shattered hoofs are turned out to graze in the fields, their hoofs in time will become, as they were originally, sound, tough and good.

This change must undoubtedly be ascribed to the wet and moisture which the hoofs are exposed to in the field, of which water is the principal ingredient ; and it is a certain fact, of which we have daily proofs, that when all other means fail, horses are turned out to grass in order to recover their decayed brittle hoofs. It is known, that the hoofs of horses are porous ; and that insensible perspiration is carried on through these pores, in the same manner, and according to the same laws, as take place in other parts of the body. Now, every body knows, that greasy or oily medicines applied to the skin of the human body, prevent perspiration, which is frequently at-

tended with the worst consequences. The same reasoning will hold with respect to the hoofs of horses: for greasy or oily applications close or shut up the pores of the hoof, by being absorbed or sucked into its inner substance. Hence the natural moisture which should nourish the hoof, is thereby prevented from arriving at its surface; which, on that account, becomes as it were dead, and consequently dry, brittle, and hard.

The original practice of greasing or oiling horses' hoofs, had probably taken its rise, from observing, that grease or oil softened dead substances, such as leather, &c. But this will by no means apply to the hoofs of horses, as there is a very great difference between the living and dead parts of animals. The former having juices, &c. necessary for their own nourishment and support, whilst the latter requires such applications as will preserve them from decaying and rotting.

The dealers in horses about London, when they get a bad-footed horse in their hands, moisten his hoofs frequently in water; for which purpose, they keep a puddle of water and dung at the watering place, that when the horse comes to water, his fore feet are sunk in the puddle, by which means they are cooled and moistened twice or thrice a day: so that, whilst they are making up his carcase for the market, his hoofs are likewise repaired, and sufficient to stand the test of a trial upon sale. But no sooner do horses with hoofs

of this kind come into ther hands, their hoofs at the same time being kept dry and greased, &c. then they degenerate into their former state. Hence the cause of so many complaints that horses turn soon lame after they come from dealers, when, in fact, it proceeds from greasy applications, and neglecting to cool or moisten the hoofs in water; for the careful groom, when airing his master's horses, rather than lead them into a puddle, will go about in order to keep their legs clean and dry.

Another practice equally pernicious, is the stuffing up horses hoofs (as it is called), with hot resinous, and greasy mixtures, under the notion of cooling and softening them. Various are the prescriptions recommended for this purpose, many of which are of a quite opposite nature to the purpose intended. There is likewise a great impropriety in stuffing up the hoofs with rotten dung and stale urine: this it is true, is moisture; but of the very worst kind, on account of the salts contained in the urine, which of itself greatly contributes towards hardenning and drying their hoofs, in place of softening them; besides the other bad effects which may arise to the frog, &c. from the rottenness of the dung. But, without commenting upon the various compositions or pompous prescriptions recommended in books, or those handed about as receipts for the softening and stuffing horses hoofs, the author would recommend one which is more natural, and ought not to be

despised for its simplicity; as it is only cooling and moistening the hoofs with water morning and evening: And, to those who are fond of stuffing, he would prescribe bran and water, or clay, &c. made into the consistency of a poultice; and in particular cases, where horses stand much in the stable, and the hoofs are disposed to be very hard, dry, and brittle, a poultice of this kind, or any other emollient composition in which water is a principal ingredient, may be applied all round the hoof; or, in imitation of some dealers, to keep a puddle of water at the watering place, which will answer equally well, if not better. From this manner of treatment the hoofs will be preserved in their natural state, and a free and equal perspiration kept up, by which the nourishment natural to the hoof will have free access to its surface, as it is this only which causes that cohesion of the parts which constitutes a firm, sound, tough, hoof.

II. *Of the natural Defects of the Feet.*

IT is very well known that different climates and different soils greatly affect the feet of horses. Those that are bred in hot countries, standing mostly upon dry ground, have deep crusted hollow hoofs with small frogs; for being but little exposed to wet or moisture, the fibres of the hoof contract more closely. And, even in Great Britain, there is a considerable difference, according to the dryness or wetness of the soil upon which horses are

bred. Those that are bred upon the mountainous parts of England and Wales, and in the northern parts of Scotland, have generally good sound tough hoofs; whilst those horses that are bred upon low marshy grounds, (which are mostly of the big draught kind), have flat, large, soft hoofs; for being kept too moist, by always soaking in wet, the horny fibres of the hoof are too much relaxed.

Those hoofs which are either too large or too small, in proportion to the size of the body, and thickness of the bones of the legs, are generally, and not without foundation, looked upon as bad. Large broad hoofs, for the most part, have thin flat soles; large, soft spongy frogs; a strong crust, something hollow upon the upper and fore part, and full of wrinkles or rings, not unlike the rough outside of an oyster-shell. Hoofs of this shape are liable to that disease termed foundered; and to have high, round, or swelled soles, and low weak heels, &c.

Small hoofs are liable to the opposite extreme, especially those of that kind which generally go under the denomination of asses hoofs, as they are deep crusted and narrow, the sole very hollow, the frog small, the heels high and strong, the crust upon the outside clear and shining: these are naturally disposed to a contraction of the whole hoof, which is called hoof-bound; and likewise to corns, running-thrushes, or frushes; either of which render a horse lame.

Some hoofs are pretty well proportioned, and look well to the eye; but, at the same time, they are thin and weak crusted, and not able to stand much fatigue in travelling upon hard stony grounds. On the other hand, very strong crusted hoofs are by no means the best, but are liable to cracks, &c. In such hoofs, the horny fibres appear very distinct, and run in a straight line from the coronet or top of the hoof to its basis, resembling the grain of some kinds of wood, particularly oak. Hence they are disposed to cracks or fissures, which cleave the hoof quite through, sometimes from the coronet down to the bottom of the hoof. In others, these cracks at first do not penetrate through the horn, but appear like a seam on the surface of the hoof, commonly named a sand-crack; which from retaining the sand and gravel, at last works its way in to the quick, and occasions lameness, &c. Another disadvantage attending very strong crusted hoofs is, that, when they stand long in a dry hot stable, they contract, and by their thickness and hardness bruise the internal parts of the foot. Hence the horse will be lame, though, at the same time, no visible defect will be seen about the hoof, excepting a great heat, pain, and tenderness in his feet, the true cause of which is seldom attended to or known; and hence the horse is said to be lame in some other part, perhaps the shoulder. Low thin heels are weak crust-

ed, and liable to lameness from injudicious shoeing. The opposite extreme, viz. very high heels, is equally bad; as these are subject to corns, and contraction of the hoof; and the deepness of the crust causes a numbness in the feet, and unsteadiness in the horse's going which make him liable to trip and stumble.

Much has been said by authors, with respect to the different colours of horses hoofs, ascribing different qualities and temperaments to peculiar colours, such as hardness, dryness, brittleness, &c. But is very well known to practitioners in shoeing horses, that there are good and bad hoofs of all colours; some being naturally weak and disposed to be brittle, whilst others are tough and strong. But a great deal depends upon the management of them in the stable, in keeping them properly moistened, in order to preserve a due medium between these opposite extremes. It is likewise generally remarked, by authors, as a sure sign of bad thin hoofs, that when the shoe nails are drove high up in the crust, it is, they say, an evidence that the crust is thin, and that there was not sufficient hold, without driving the nails high up. But this can be no true criterion to judge by; for if the nails can be driven high up in the crust with safety in a thin weak foot, the same may as certainly be done in a strong foot, with more ease and expedition, which indeed is frequently the case.

To form a right judgment of what may be called a good hoof, it must neither be too large nor too small in proportion to the size of the leg : at the same time, its shape must be regular, gradually enlarging from the coronet towards its basis ; the crust smooth, even, and free from seams, cracks or wrinkles ; the sole strong, and a little hollow ; the heels firm and open ; the frog tough, sound, and dry.

CLASS XI.

SECC. XXXI.

WOUNDS IN THE FEET.

WOUNDS in the feet happen frequently, but chiefly from want of proper care, and treating them injudiciously when they are first inflicted.

1. Wounds upon the coronet, or top of the hoof, when superficial, are easily cured, if not neglected or improperly treated. But the most simple wound, by bad management or neglect, may, especially if the horse should happen at the time to be in a bad habit of body, be attended with dangerous consequences : therefore, however trifling they may at first appear, they should be treated with attention.

When large deep wounds are inflicted upon the coronet, from which may be apprehended a great inflammation, and its consequences; to prevent these evils as much as possible, it will be necessary to have recourse to bleeding, and, at the same time, to give such internal remedies as are recommended in inflammatory cases; cooling salts, glysters, &c. together with a low soft diet, keeping the hoof moist and soft with emollient poultices applied around it, which may be made of turnip, mallows, or even bran and water.

Deep wounds upon the coronet are generally made by long sharp caukers upon the heels of the shoes of the opposite foot, penetrating downwards between the coffin-bone and the hoof. In this case, as there is no depending orifice or passage for the matter contained in the wound to be discharged downwards, there is great danger of a fistula or sinuous ulcer being formed: to prevent which, an artificial drain or opening must be made through the hoof, first rasping or paring it very thin upon the outside where the perforation is to be made; then introduce a sharp-pointed instrument, a little bent, into the orifice of the wound, and passing it to the bottom, force it outwards. This operation will be performed with less pain to the animal, if the instrument be concealed within a casula or hollow tube, till it reaches to the bottom of the wound; when the perforation is to be made by pushing it beyond the extremity of the casula; and, by applying a bandage pretty tight round the coronet, the sides or lips of the wound may be brought into contact and healed up, or a seton may be introduced, and continued till the inflammation, swelling, &c.

is removed. If this operation be too long delayed, the matter confined in the wound forms a number of sinuses or fistulae, which frequently run in different directions under the hoof, and require a large portion of it to be cut away before they can be healed up, leaving an ugly blemish, and a weakness or tenderness on that part of the hoof, which never admits of a thorough cure. But, by treating it in the manner now mentioned, the annular ligament may be preserved entire, and a false quarter avoided: and although there may remain an horizontal crack or fissure in the hoof where the perforation was made; yet, as the hoof grows downwards, it will likewise go along with it, and wear out, without leaving a blemish or any other bad consequence.

When the capsular ligament of the coffin-joint is wounded or perforated by any instrument, so as to admit the external air into its cavity, the glands there situated inflame; and, in place of secreting a lubricating mild liquor, they discharge a sharp ichorous fluid, which destroys and corrodes the very cartilages or gristles upon the ends of the articulated bones, which at last grow together, and form what is termed an anchylosis, and of course lameness. There are many farriers who boast of their having cured wounds in the joints after they were affected with that symptom which they call a joint-water, that is, a discharge of the synovia or mucilaginous fluid contained within the cavity of the joint. But what they commonly call a joint-water is only a yellow serum or lymph, which is frequently to be met with issuing in great abundance from wounds in the legs; and not the synovia or fluid contained within the cavity of the joint.

Notwithstanding the wounds of this kind happen frequently ; yet, so little are the generality of practitioners acquainted with the nature of them and their consequences, that they make no distinction betwixt them and those of a more simple nature. Hence, therefore, they find themselves frequently mistaken in prognosticating the cure of a wound, to appearance of a very simple nature.

It is a certain fact, confirmed by experience, that, when the capsular ligament of any joint is perforated or cut through, there is but little chance of a complete cure being effected, so as the horse may be useful for the saddle or carriage; although, in other respects, to those who are willing to be at the expence, he may, if a strong horse, be useful in some kinds of drudgery.

As to the mode of dressing wounds of this kind, all that art can do, is to prevent, as much as possible, a violent inflammation or flux of humours to the affected limb, by bleeding, glysters, cooling salts, together with a low soft diet, applying digestive poultices to the wound, and injecting now and then into the cavity of the joint tincture of myrrh.

2. Wounds upon the coronet towards the back part of the foot or heel, which are commonly called an over reach, are occasioned by the toe of the hind-shoe on the same side cutting the fore-heel. Some horses are much addicted to this, owing entirely to their manner of going, viz. the hind-foot moving in the same line of direction with the fore-foot ; in riding fast, the fore-foot not giving place in time to the hind-foot, strikes against the fore-heel : hence some horses, in trot-

ting, make a clattering noise with the hind-shoes striking against the heel of the fore ones ; hence, likewise, many horses are thrown down by the same cause.

Although an over-reach is a wound of the complicated kind, being at the same time a contusion or bruise together with a wound ; yet they are nowise dangerous, and are easily cured by treating them in a manner hereafter mentioned ; for, in two or three days, when the wound comes to suppurate properly, the bruised or dead parts fall off, and only leave a larger surface of a wound than was at first apprehended.

With respect to the dressing proper for recent wounds, farriers are too much prejudiced in favour of certain balsams, ointments, and tinctures ; and too sanguine in the belief of their supposed specific virtues, the healing qualities of which they flatter themselves are irresistable. But the truth is all that art can do in the healing of wounds, is to remove every impediment which may obstruct the uniting of the divided parts, and to forward the formation of laudible pus or matter ; that being once effected, the rest is performed by nature, which is self sufficient. All the balsams and remedies which are said to generate new flesh, in fact only assist nature by excluding the external air, keeping the wounded parts warm, and confining the secreted humours, which, by remaining there a due time, are converted into laudible matter, which is the balsam of nature's preparing. Therefore, the most approved and rational method of treating recent wounds is, to endeavour to bring them to a suppuration or dis-

charge of laudable matter, for which purpose, poultices are most eligible, as they may be easily made more or less of a digestive quality, by melting and mixing any proper digestive ointment with the poultice whilst warm.

1. *Digestive Ointment*.—TAKE common turpentine and hog's lard, of each equal parts, melted together.

This ointment may be made stronger or weaker, by diminishing the one ingredient and increasing the other; and is very proper to be mixed with poultices, in order to keep them soft and pliable.

2. *Digestive Poultice*.—TAKE oat-meal or coarse wheat-flour; digestive ointment, two ounces; beer grounds, a sufficient quantity: boil the whole to the consistency of a poultice. The quantity of the ointment may be increased or diminished in proportion to the size of the poultice.

The experience the author has had of the good effect of poultices of this kind in recent wounds, makes him recommend them as preferable to any other mode of dressing, for promoting a quick suppuration, and leaving a smooth even cicatrix.

3. *Emollient Poultice*.—TAKE oat-meal, or coarse wheat-flour, and linseed powdered, of each half a pound. Boil them in milk or water to the consistence of a poultice: to which add of sal armoniac, in powder one ounce.

This emollient poultice may be applied when there is a great heat, inflammation, or swelling,

attending wounds ; and by the addition of fresh butter, lard, or oil, may be made of a more relaxing nature.

Many people are indeed prejudiced against the use of poultices, from a wrong notion, that they (as the phrase is) draw humours to the wounded part ; but the absurdity of this way of reasoning will be evident to those who are acquainted with the healing art.

“ Poultices (says Mr. Bartlett) are of such real and extensive use in farriery, that we thought the composition of them could not be too general. How simple soever the ingredients may appear to some, (which are generally at hand), yet they will be found to answer most intentions, where present ease is to be obtained by warmth, softening, and relaxing the injured part. Many are the cases which demand such assistance, as recent swellings, inflammations, treads, bruises, cracked and swelled heels and feet, burns, scalds, bruised and lacerated wounds from stumps, thorns, glass, nails, &c. which last are much better treated with such simple emollient applications, than by hot oils or scalding plasters dropt into the wounds ; which, under the absurd notion of drawing, but too often sear up the mouths of the vessels, hinder digestion, and consequently increase both pain and inflammation. In short, it is certain that very great services are daily done by the use of poultices, not only in those disorders to which the human body is incident, but also in those wherewith the brute part of the creation is afflicted. One advantage which they have over most outward applications is peculiar to them, that they convey and retain an additional heat,

besides what is often in the ingredients ; and as most of them have also something emollient in their composition, they must necessarily soften and relax the skin and vessels, abate tension, attenuate and thin viscid and obstructed juices, so that their return into the common course of circulation, or discharge by the pores of the skin, must in general be much better answered by poultices than by other methods."

Poultices may be continued till such time as the wound appears to be well digested, (that is, a kindly suppuration of white well concocted matter), look smooth and equal, free from cavities or excrescences of proud flesh ; in that case, the use of poultices may be left off, and the surface of the wound may be sprinkled over with the following mild escharotic powder.

4. TAKE burnt limestone, that breaks down on being exposed to the air without water, three ounces ; Armenian bole, one ounce ; rubbed together in a mortar, and put through a fine sieve.

After the wound is sprinkled with this powder, a pledget of dry lint may be fixed gently over it ; and, when the surface of the wound is nearly equal with the skin, the powder will be sufficient, without any cloth or covering.

3. There is another species of wounds to which the feet are much exposed, called *punctures*, on account of their small orifice, as the parts immediately after the wound is inflicted readily close up, whereby it becomes difficult to know the depth of the wound. They are generally occasioned from treading upon sharp stones, broken glass, sharp bones, and nails, and likewise from nails in

shoeing ; either of these perforating the sole or frog, and wounding the internal parts of the foot ; which from their situation and confinement within the hoof, are attended with the most violent pain and inflammation, which are frequently increased by the injudicious method generally observed in treating these wounds when first inflicted, by the application of hot corrosive oils poured into the recent wound, in order to deaden it, which is productive of the worst of consequences. Thus, a fine young chaise-horse, upon a journey, was pricked with a nail in shoeing ; which being immediately observed, the farrier poured into the wound oil of vitriol. The horse continued very lame ; and, upon the third day, he gave up, not being able to travel any longer. The leg, immediately above the hoof swelled to a most enormous size, broke out in different places, and discharged an incredible quantity of bloody matter, by which the whole limb was wasted, and the horse rendered entirely useless.

Punctures or pricks from nails in shoeing, are commonly said to proceed from ignorance or blundering. This may sometimes be the case ; but, at the same time, it is an accident that may, and indeed does, happen to the most expert artist ; and it is suprising, considering the narrow space there is in some hoofs for driving nails, that it does not happen more frequently. When it is discovered in time, it is easily cured, by opening a passage for the matter downwards, and dressing it with any digestive ointment or poultice, and keeping the foot moist, by applying an emollient poultice all round the hoof. But when it is overlooked, or a fragment of the nail remains in the

wound, the inflammation increasing, it at last suppurates. The matter accumulating, and not finding a passage downwards, from the natural formation of the hoof, it moves upwards to the coronet or top of the hoof, and forms a round tumour, which afterwards breaks out and degenerates into a most malignant ulcer, commonly termed,

4. *A Quittor-bone.* This tumour is attended with great pain and inflammation, and a considerable swelling round its basis. The method of cure, commonly practised, and indeed recommended by authors, especially Dr. Braken, is to bore a number of holes into the substance of the tumour with a hot iron, pointed pyramidally; and to introduce into these holes small pieces of corrosive sublimate, (some even use arsnick), which corrodes and destroys the flesh for some space around them, and at last separates from the sound parts, in a hardened mass of dead, mortified flesh, called a core, which falls off and leaves a large surface of a wound. But, frequently, a second or sometimes a third operation is found necessary, before the fistula or sinus can be opened to the bottom, and the proud flesh totally overcome, which grows very luxuriantly, and renders the cure tedious, uncertain, and very painful to the animal. Therefore, as this method of cure is attended with so many inconveniencies, and is even dangerous from the quantity of sublimate, &c. made use of, which may as readily destroy the ligament of the joint, bones, &c. as the substance of the tumour, it ought never to be used but with caution: and when other means have failed, as it likewise endangers the life of the horse. The knife seems far preferable: first, tie a ligature

round the fetlock, in order to stop the bleeding; and, with a crooked sharp knife, cut out the tumour to the bottom; afterwards dress it like a fresh wound, till it is healed up.

In ulcers of this kind, as there are a number of sinuses or fistulæ, which run in different directions underneath the hoof, it is hardly possible to avoid destroying the annular ligament which lies below the coronet, and cutting away a large portion of the hoof; yet, in many cases, (especially when there is an opening in the tumour), the method proposed, at the beginning of this section, for curing the deep wounds upon the coronet with seton, may be first tried; and, if that does not succeed, either of the operations above mentioned may be performed.

Punctures differ little or nothing, in the manner of treating them, from wounds; only the sole or frog should be scraped all round the orifice of the wound, which, at the same time, if too small, should be enlarged, and the digestive poultice applied, taking care that no fragment or extraneous substance remain in the wound, and keeping the whole hoof moist and soft with emollient poultices around it; and, in cases attended with violent pain, recourse must be had to such internal remedies as are proper in inflammatory cases, such as the following mixture by way of a drink, in order to prevent, as much as possible, an inflammation, or a flux of humours to the afflicted limb, bleeding being first premised, together with using a low soft diet.

5. TAKE salt of nitre, two ounces; common treacle, two ounces. Dissolve in a quart of water.

It will be necessary to repeat this draught morning and evening; if the horse should shew any uneasiness, or appear griped, the quantity of water may be increased, or the same quantity of nitre may be given the horse in a mash of bran twice a-day, if it does not cause him to loath his food. If the coffin-bone should be wounded and turns carious, it will be tedious to wait for an exfoliation, as, from the spongy texture of this bone, it exfoliates but slowly: therefore, if it can conveniently be done, the carious parts may be scraped off with a knife, and afterwards dressed with pledgets of tow dipped in the tincture of myrrh; and let the poultice be applied above it.

In punctures, as above described, it is a common practice to pour into the wound hot corrosive oils, (some even run into the wound an iron nail made red hot), in order, as the phrase is, to deaden the parts. In superficial or slight wounds, when perhaps little more than the hoof is wounded, the application of hot oils can hardly be very hurtful. But the the barbarous method of pushing a hot nail into a recent wound, cannot fail of being attended with bad consequences, as the cure is unquestionably worse than the disease. But, at all events, when the puncture is deep, either of these cruel methods is extremely hurtful. The wound is said to be of the most inveterate or desperate kind; when, in fact, the bad practice of injudicious applications, &c. escape the just censure they deserve.

5. *Contusions or Bruises* happen frequently on the coronet or top of the hoof, from the treading of other horses feet, which will occasion lacer-

ness; although, at the same time, no external mark of violence will appear on the coronet, farther than a little swelling, or the horse will show a sense of pain when the affected part is touched or pressed upon. The following poultice in this case may be applied with success, if continued for some time.

6. TAKE thick lees of wine or vinegar, one pint; crude sal ammoniac, two ounces; oatmeal or bran, sufficient to make it of a due consistence. Dissolve the sal ammoniac in the lees first.

Before concluding this section, it may not be improper to mention the following rules, which ought carefully to be attended to by every practitioner. 1. The first thing to be observed in dressing wounds is, to remove all foreign bodies, (if it can be done with safety), all lacerated or torn parts, whether of the flesh or of the hoof, &c. which, from their being left in the wound, would greatly impede the cure. 2. All wounds should be carefully inspected at every dressing, observing attentively whether any alteration has been made on their surface, whether they be clean at the bottom, and free from any extraneous substance that may hinder or retard the cure. 3. Whatever appears mortified, or any fungous or proud flesh, must be removed, either by suppuration, by the knife, or by caustic. 4. Cramping wounds with hard tents, or syringing them frequently with spirituous tinctures, are extremely hurtful. The former increases the pain and inflammation, &c. the latter produces a callus up-

on the internal surface of the wounds, which prevents their healing. 5. The dressing of wounds should lie smooth and easy upon the parts. 6. Overtight ligatures or bandages should be carefully avoided. 7. As wounds in the feet or legs, for obvious reasons, are more difficult to heal than on any other part of the body ; therefore, rest, and a wide stall are absolutely necessary, together with a low regimen or soft diet, in order to keep the body cool and open.

CLASS. XII.

SECT. XXXII.

Of that Disease in the Feet commonly called

FOUNDERED.

THE term *foundered* is frequently applied to lame horses in a very vague manner, and without any determined or fixed meaning: for when a horse shows any defect or impediment in moving his fore feet, he is then pronounced to be foundered whether he really has been so or not; that is, according to what is commonly understood by that term, owing to the want or neglect of not making proper distinctions of the different diseases in the feet. If we consult authors who have treated upon this subject, we shall find their accounts of it very dark and imperfect; they bewilder the reader, and convey but a very indistinct idea of the nature of the disease: hence many errors are committed in practice, to the destruction of a number of valuable horses, which otherwise, by proper management might have been rendered sound and useful. When a horse is first attacked with this disorder, he shows a great restlessness, is hot and feverish, heaves much at the flanks, breathes quick, has a quick strong pulse, and groans much when moved about; at the same time, he shows symptoms of the most violent pain, sometimes in one, but more

frequently in both fore-feet ; for which reason he lies down much ; but, when forced to move forwards, he draws himself together, as it were into a heap, by bringing forward his hind feet almost under his shoulders, in order to keep the weight of his body as much as possible from resting upon his fore-feet. In stepping forward, he sets his heel down first with great caution, as afraid of touching the ground. This last symptom should be particularly attended to, as from it we may conclude with certainty that the chief seat of the disorder is in the feet. The hoofs at the same time are extremely hot ; and if water is thrown upon them, they dry instantly : if an attempt is made to pull off any of the shoes, the horse shews great uneasiness upon the least twist or pressure made upon any part of the foot, and a great unwillingness to support the weight of his body upon the other foot, especially when they are both alike affected.

It is universally allowed, that the cause of this disease proceeds from too violent exercise, such as riding very hard upon stony grounds or turnpike roads, and that young horses are most liable to it ; and to these we may likewise add, unequal pressure upon the internal parts of the foot, from the concave or hollow form of the common shoes. All these causes combined together, when a horse is of a plethoric or full habit of body, and not accustomed to violent exercise, occasion this disease in a greater or lesser degree. To form some faint idea of this malady in horses, we may in a great measure appeal to what we experience ourselves in running upon hard ground ; for we find, that it occasions a great heat, attended with a smart

pain in our feet, which would be greatly increased from uneasy shoes, especially if compelled (like horses) to continue the running for any considerable time. The feet likewise become turgid and painful after a long day's journey, especially if the person is not accustomed to travel; and this inflammation frequently terminates in blisters upon the soles of the feet. Hence it is evident, that, in proportion to the habit of body the horse is in at the time, and the violence of the labour or exercise he has undergone, the inflammation in the internal parts of the foot will be more or less violent, and attended with all the symptoms already mentioned.

This disease, then appears from the symptoms attending it, and the effects it afterwards produces in the feet, to be, in its first stage, an inflammation of the internal parts of the feet, arising from the violent exercise, which occasions a more than ordinary determination of the blood to the feet; hence that rapid circulation of the blood in the vessels within the hoof, which frequently terminates in a rupture of these vessels, and of course an extravasation of the blood, and in some cases, a total separation of the horny substance of the hoof from the aponeurotic fibres upon the fore part of the coffin bone; whilst in others, where it has been less violent, a concretion or growing together of the parts within the hoof has taken place, so as to appear upon dissection one solid mass; and hence lameness.

Thus, a young chaise-horse, after a hard day's work, was attacked with all the symptoms already mentioned, and was treated in the common

manner as above related, that is, rowelled, &c. In a few weeks after the disease had taken its course in the ordinary way, he was put under the author's care. The sole, a little before the point of the frog in one of his fore-feet, became soft; and having a curiosity to see the cause of it, the author cut away the sole, which was but thin, and found a cavity containing a reddish coloured liquor: after removing the ragged parts of the hoof, a large transverse opening showed itself, into which a probe was introduced upwards between the coffin-bone and the hoof; the connection between the tendinous fibres upon the surface of the coffin-bone and the hoof, was destroyed at the fore part or toe; the bone losing part of its support, pressed down upon the horny sole, and produced that swelling or convexity of its surface, which is called a high, round, or pumice sole. The hoof lost its former shape, growing narrow towards the toe, with a preternatural thickness of the horny substance of the crust, whilst the quarters or sides of the hoofs were decayed, thin, and full of deep wrinkles, together with a hollowiness upon the surface of the upper part of the hoof, the whole foot having a diseased appearance. When the horse had recovered so far as to be able to walk, in going forward he threw out his legs well before him, but drew them backwards before he set his foot to the ground; setting the heel down first with great caution upon which he rested most, the toe being turned a little upwards. From this symptom only, we may judge with certainty, even though at a distance, upon seeing a horse walk, whether he has ever been foundered or not.

This disease proves still more violent, and sometimes fatal, if the horse has been allowed to stand in cold water when his feet are overheated. Thus, a saddle-horse, after being rode very hard, was turned loose into a stable-yard all over in a sweat; he went immediately into the water-pond, where he was suffered to stand for a considerable time in very cold weather: a few hours afterwards he was seized with a most violent fever, and a great pain in his fore-feet: he lay upon the litter for some days in the greatest agony; and at last both his hoofs dropt off, occasioned by a mortification brought upon the parts from the application of the cold water, which rendered him entirely useless.

From what has been said with respect to this disease, it is evident, that as the circulation is greatly increased, and the current of blood chiefly determined towards the fore-feet, attended with symptoms of the most violent pain, we may thence conclude, that there is an inflammation in these parts: therefore, the cure must first be attempted by diminishing the circulation of the blood, giving cooling salts internally, as glysters, an opening diet, and plenty of diluting liquor four or five times a-day, together with emollient poultices applied warm all round the hoofs, in order to soften them, and keep up a free and equal perspiration; observing, that his shoes be easy upon his feet; but by no means to pare the sole or frog to that excess which is commonly done in cases of this kind, farther than cleaning away the hardened surface of the sole and frog, in order that the poultice may have the desired effect, by increasing the perspiration through the pores; and

to avoid all manner of greasy or oily applications to the hoofs, for the reasons already mentioned.

In all violent inflammations, there is nothing which contributes more to give immediate relief, than plentiful bleeding timely performed; and which ought by no means to be neglected, or too long delayed: for, in cases of this nature, although the fever may be so far overcome by strength of constitution, or prevented by medicines from destroying the life of the animal; yet the effects of it will ever afterwards remain.

FINIS.







